

NON-FORMAL EDUCATION

**AN
ALTERNATIVE
APPROACH**

R.P. SINGH

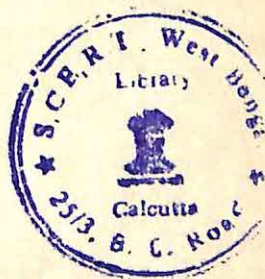
The present volume presents a comprehensive coverage of Non-Formal Education in India. Details of the scheme in operation in the country have been provided for a better understanding of it even as its foundations have been explained for an appreciation of its *raison d'etre*. The chapter on International Experiences provides a wider perspective of NFE because India shares the information available elsewhere. To what extent our approach is different from or similar to Non-Formal Education in other countries has to be explained and understood because exact replicas of even the best of schemes are not easy to make. India has moved in the right direction and the plea made in the preface underlines the need to make it even more responsive to the country's social requirements. Some day, the author hopes, NFE will become a truly alternative system to formal education. On that day India will have really entered the 21st century with adequate means to meet the challenge of the future.

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R.P. Singh



STERLING PUBLISHERS PRIVATE LIMITED

STERLING PUBLISHERS PRIVATE LIMITED

L-10, Green Park Extension, New Delhi-110016

G-2, Cunningham Apartments, Cunningham Road, Bangalore-560052

West Bengal
24-4-89
No. 4363

Non-Formal Education: An Alternative Approach

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Reprint 1989

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PRINTED IN INDIA

Published by S.K. Ghai, Managing Director, Sterling Publishers Pvt. Ltd., L-10, Green Park Extension, New Delhi-110016. Photocomposed at Vikas Compographics, A-1/256 Safdarjung Enclave, New Delhi. 110029. Printed at Ramprintograph, New Delhi.

PREFACE

This volume seeks to explain the present day format and practices of Non-Formal Education (NFE) both in India and abroad. While attempting to explain the concept and practice I have tried to view NFE as an alternative to formal system—*which in practice it is not*. I strongly believe that NFE should be treated as an alternative and not as supplementary or complementary to formal system. I even hold the view that no officer who has ever worked with the formal system should be allowed to come near NFE and the instructional material prepared for the NFE should be prepared by those who are aware that the formal system has failed. It is only by increasing the teaching and learning load these formal system people have been claiming superiority over their system. It is acknowledged on all hands that more than half of what is taught in the formal system can be cast aside without loss to anyone. Besides, we all know that the centrality of language skills is not recognized by the formal system although they have a considerable number of periods allotted for the teaching of languages. Despite the fact that India has two major institutes supported by the Government for developing instructional materials and improving methods of teaching both Indian and foreign languages—no one has recommended to the Government that since any language can be taught adequately within a short term of three to four months—the foundation to teaching any other subject should be laid on an intensive teaching of the mother-tongue or a foreign language. Research has shown that even after learning a foreign language for ten years students develop no skills in that language. They continue to fumble and flounder and speak in a manner which only the speaker himself can understand. Such a foundation cannot equip anyone to learn any subject-matter. Therefore, I believe that chastened with this knowledge we shall teach, if the students wish to learn, first the communicative skills and then the subjects or modules of information after the relevance of each has

been established by research.

It is possible and indeed very desirable to make NFE a separate, independent and alternative system from the kindergarten upto university level. The open universities should oversee the progress of the NFE. In fact, my plea is that the NFE should stand in competition with the formal. Let the open universities be governed by another agency and not the UGC—which is considered as merely a grants-in-aid giving agency. This open system or the NFE should be self-regulated.

The fact that NFE is cost-effective should not make one hold the view that it is for the poor alone and the other system is not for them. The logic should be that NFE is new and also need-based and therefore *it is different*. Since it is also cost-effective, it can reach a larger number of people and since it is modifiable according to demand, it is also relevant.

I plead with the powers that be that they should try to assess NFE more objectively. Let NFE cater to that aspect of our needs which have not been attended to by the formal system, either for want of time or some other reason.

R.P. SINGH

CONTENTS

<i>Chapter</i>	<i>Page</i>
<i>Preface</i>	... (v)
1. The Concept	... 1
2. The Foundations of NFE	... 11
3. The Goals and the Scheme	... 20
4. Research in Non-Formal Education	... 41
5. NFE and the Role of State and Voluntary Organisations	... 49
6. International Experiences	... 56
7. NFE : A Summation	... 74
<i>Appendix</i>	
I. Tools for Evaluation of NFE Instructional Material	... 85
II. Editorial of <i>THE TIMES OF INDIA</i> dated 23-4-86	... 106
III. Revised Scheme of Non-formal Education (1987)	... 107
IV. Salient Features of the Revised Scheme of NFE	... 122
<i>Index</i>	... 129

THE CONCEPT

In a changing world no concept can be defined for all times to come. What we call the formal system today must have been a very revolutionary concept and practice a few hundred years ago. We could see the same happening in the case of several disciplines at the university level as well. For example, philosophy has served as the mother science for disciplines like psychology and education. Numerous skills which were once passed on from generation to generation as part of family tradition have become full-fledged avocations and anyone can be initiated into the mysteries of these skills like goldsmithy, shoe-making, basket-making, etc. Therefore what appears new today would soon become old, formalized and very familiar tomorrow.

The present day concept of non-formal education likewise appears novel and quite revolutionary. What exactly is this concept? How has it evolved? And, what do we understand by this in this country?

Apparently this concept is less than two decades old but during this comparatively brief span of time numerous interpretations have been advanced to define it. If for a few, non-formal education is supposed to be complementary to the formal, for others it is an alternative to the formal system. For Coombs (1973) NFE means "any organized, systematic educational activity outside the framework of the formal system (designed) to provide selective types of learning to particular sub-groups in the population, adults as well as children". In other words it is being conceived as an organized activity outside the formal system i.e. as an alternative or even as complementary to the formal education.

According to Professor Malcolm's Adisesiah "the non-formal education is wide-ranging because it comprehends all learning

outside of the formal system, and has no parameters of time and space. It can be classified for pre-school, un-schooled and underschooled children in the age-group 1-15, and for youth and adults, unschooled, underschooled or needing new additional skills in the age group 15-60. Non-formal learning can also be classified by the learning content involved into these organised activities where the major emphasis is on general education, and also those where the content is mainly vocational".

The NFE is regarded by many as a complex concept comparable to development. It is complex in its learning content which has to be improvised for each group of clients. It is complex in the multiplicity of media of learning and its value is not adjudgable in terms of certificates. But it is part of the total system of education all the same.

A few regard NFE as a tool for social rather than personal or economic development. One of the reasons why the perception of NFE by different groups of people has differed so radically is that the social or political activists wish to use it as a tool for their programmes. In South America particularly, NFE has been regarded as a handmaid for political change. When the development planners started looking at NFE they thought of it as "educative services" and consequently both illiterate adults and the drop-outs and left-outs of the formal education were also subsumed under this generic term 'NFE'.

'Development' has been viewed largely as an economic phenomenon until recently. If the GNP of a nation has been growing satisfactorily that country has been regarded as 'developing' satisfactorily. The education sector was, therefore, expected to meet the growing requirements of a trained middle- and high-level manpower for the sustained growth of economy. In the past one decade or more the emphasis has shifted to increasing the productivity of the masses, particularly the rural masses. Education should therefore logically support these masses in their day-to-day activities. It is now believed that by developing a nations' 'human resource' base—by making masses more effective producers—the GNP would grow as a natural consequence. The NFE is therefore considered by several thinkers as part of the literacy and skill development

programme and not unnaturally as a support for adult education drive. In countries where literacy remains a distant dream NFE is being pressed into service to help that drive by bringing in a few dimensions of her own like 'enhancing the awareness level' of people and 'achieving the optional use of resources for education'.

NFE as Distinguished from Formal and Informal

NFE as an 'ideal' type differs both from formal and informal education. These include but are not limited to costs, structure, instructional methods, linkages with the occupational structure, and nature of awards. The informal education is restricted to parents, especially mothers, siblings, peer groups and the exposure to all types of propaganda. Unlike the formal education the NFE has no predetermined time-table or the pace of academic progress. The NFE is basically non-competitive and open-ended. It has limited purposes and goals. The NFE process usually requires the participation of its recipients in determining the nature and content of the educational programmes, who always tend to focus on the needs and priorities of the communities. The additional distinction between the NFE and formal education should therefore constitute an active participation of the recipients in the former and not in the latter.

NFE—What does it do ?

Several definitions of the concept and practice of NFE are available but what really distinguishes it from all other systems is the expertise it holds out to its users. It is said that NFE proposes to be a more effective approach to solving certain problems of education for individual growth as well as national development. The education provided under NFE is both need-based and functional. NFE is not only cost-effective, but also innovative and goal-oriented.

The NFE offers a more elective multi-disciplinary approach to the problems of development in a country than the formal. Its effects are both short-term as well as long-range. Lastly it is supposed to provide a more rapid and immediate measure of the effectiveness of instructional design.

NFE—As a Process

We have already seen that NFE as a concept is only two decades old but as a practice and process it is as old as human history. The ancient Chinese and the Hindus practised it as part of their family tradition. Skills and knowledge were transmitted within the family but for this transmission of skill or knowledge no one fixed any timetable, evolved a curricula or set an examination. The reward for learning lay in public recognition and consumer appreciation. Both the Buddhists and the Hindus taught their pupils by demonstration and the actual usage of a piece of knowledge. Buddhist monks were enjoined upon to have open discourses with village folks and teach a skill in the neighbouring area of their monastery on demand. The ancient Greeks had their roving teachers even as the modern Nepalese have their schools on the buffalo's back.

Is NFE an Alternative to Formal Education ?

NFE as commonly understood and defined in the Government of India documents is only a complementary system to formal education. It is being planned, designed and propagated by almost all government agencies as such a sub-system of formal education. Perhaps the terms more commonly, associated with NFE are "cost-effective", need-based, 'functional', 'flexibility', 'drop-outs', etc. The impression generally being created is that NFE is meant only for the poor, left-outs and the down-trodden and is not an alternative like it is in the First World Countries. Although the Government—whether of Centre or State, is the major source of funding NFE programmes, numerous voluntary organisations besides international organisations are working in this field. It should not surprise any one if we accept the Government of India's reasons for adopting NFE as the typical Indian approach to this programme. The reasons for the Government's adoption of this programme are as follows:

- (a) being flexible it would prevent the present rate of drop-outs,
- (b) being inexpensive it would suit even sparsely populated areas.

- (c) being linked with general development, those coming to a non-formal arrangement would learn skill, besides numeracy and literacy.

Considering that India has a substantially large number of people who live below the poverty line and the majority of the Indian people live in rural areas or tribal belts the adoption of NFE as a major Governmental endeavour may also mean that the NFE has been accepted by India as an alternative to the formal system. Also it is true that the actual users of NFE shall rarely go over to the formal system. The thrusts that we notice in a few State Government programmes about the possibility of using NFE as a step towards helping its recipients to join the formal system does not make it a complementary of the formal system. Therefore, India's NFE belongs to the twilight zone of being both complementary and an alternative to the formal system. The special efforts being made to link NFE with improving one's quality of life by making people aware of their environment, health and hygiene problems, etc., immediately make us perceive the NFE as an alternative to the formal system because so far the latter has no such similar emphasis.

We must note here that only in the most advanced countries has the NFE been accepted as an alternative to the formal education. These first-world countries gave almost cent per cent literacy, their birth-rates are very low so as to make population grow at zero-rate and then GNP continues to rise in direct proportion to the improved skills and competencies their professional groups acquire at the institutions of higher learning. So that they teach at NFE centres is no rehash of their formal system. Unfortunately in India we are not so happily placed.

The Beginnings of Indian NFE Programmes

The Non-formal Education (NFE) programme originated in India through a resolution of the Central Advisory Board of Education (CABE) adopted in 1974. The board was stated to be convinced that the goal of universal education cannot be realised through the exclusive reliance on the formal system of education with its single-point entry, sequential

character and full-time teachers. The board, therefore, recommended that a radical reconstitution of the existing system should be carried out through the adoption of multiple-entry system and a large-scale programme of part-time education for those children who cannot attend schools. In 1977 on April 5, the then Minister of Education declared that within a decade illiteracy would be wiped out. Accordingly the Planning Commission set up a small group to go into the problem of identifying states which had higher rates of illiteracy than others. Consequently nine States were declared educationally backward viz: Andhra Pradesh, Assam, Bihar, Jammu & Kashmir, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal. All these nine States had, therefore, to be paid special attention both in terms of financial resources and physical facilities. The Union Ministry of Education asked all these nine States to start 500 centres each of NFE. The National Council of Educational Research and Training (NCERT) was asked to develop instructional strategies and programmes for these centres. In other words the Union Government released sufficient grants to run these centres. The age of children to be covered by NFE programme was 9-14.

The Government of India showed its seriousness about its concern for the removal of illiteracy by launching a National Adult Education Programme (NAEP) as well, besides several minor ones which were either already being run by voluntary bodies or State Governments. The sphere of activities for all these programmes and their target groups were considerably different. But the principal purpose was to help reduce the quantum of illiteracy.

Linkages with Other Programmes, Like "Formal Education and Adult Education"

India's NFE programme has certain unique characteristics and therefore has little resemblance with its counterpart in First World countries. NFE in India has twin objectives in view in addition to what it should be doing otherwise as well. These objectives relate to its role vis-a-vis formal education and adult education. We shall see in the subsequent chapters

how NFE is being used to upgrade its own students to the formal system and to what extent a part of its programmes has to match with the expectations of adult education in India. Various models of NFE which have been evolved illustrate the explanation thus given. For example Kumud Bansal deals with the problem of linking NFE with adult education and states: "Only technical integration can, in fact, do us a disservice because at the purely technical level we might be attempting to integrate two different things. Both these programmes have to be seen as a part of the surrounding society, teaching and using knowledge which can actually be put into practice"¹.

Agreeing with Wyn Courtney and Gerhard Kutsch, R.P. Singhal says "integration at the programme level (i.e. between formal and NFE) would lead to a unified and unitary system of education"². The merits of this statement could be witnessed in the M.P. model of NFE.

We must not forget that NFE has its own independent status and function and that is why we should not be confused between what it is and what it is made to do.

The NFE and its Clientele

For whom do we have the NFE programme? This is an extremely relevant question. The perception of NFE clientele is equally important besides that of planners who would like this programme to benefit given groups of people. We can discuss here the target groups of the planners but not the reception of these programmes by the target groups as sufficient data are not available and also because NFE centres have been opened according to what the clientele planners had in view and not on the basis of any demand that may have generated from the grass-root levels. The target groups therefore are:

1. *Children Outside School*

In majority of advanced countries where literacy rates are

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1. Linkages Between NFE and Adult Education by Smt. Kumud Bansal, NIEPA, 1985, p. 3.
 2. Linking Formal and Non-Formal Education by Dr. R.P. Singhal, NIEPA, 1985, p. 8.

very high children do not form part of the NFE programmes. However, countries like India have a serious problem of illiteracy. Either children do not enrol at all or they drop out as soon as they enrol. The enrolment of children could go up to 90 per cent in certain areas but figures recorded are considered by many as inflated. Whatever be the truth behind these figures at least 10 to 15 per cent of the total schoolgoing population do not go to school. If to these are added the number of those who have been to a school but dropped out quickly the total may exceed 50 per cent in numerous areas.

Consequently, it is to this vast majority of children who for want of basic facilities like food, shelter or clothing have to remain outside of the school premises the NFE programmes are addressed. Such children who have migrant labour as their parents or live in slums or tribal areas etc., also fall within the ambit of NFE. We must remember that NFE is not a programme developed out of pity for these children but has national development as the goal. It is therefore natural that the system of education must evolve a facility to meet their needs as well and NFE is therefore the only answer to this problem.

The planners in India have shown concern for young children and young people outside the school, who have yet to find a place in society. The aim therefore has been to evolve NFE to help them discover it. It was also thought that the emphasis of NFE for children in the younger age groups "should be on meeting basic, social and learning needs related to local social, cultural and community conditions".

Non-formal education for school age children thus merges into provision for unemployed youth. Each group that we have got is victim of the general problem of an inadequate primary schooling and a mismatch between schooling and employment prospects.

2. The Unemployed Youth

The formal system has failed to provide education and training in the employable skills to youth and therefore we

find school-leaving children facing a problem in the job market. Also, skills keep on changing as do their quality and content and new skills keep on emerging which cannot be easily provided for in the formal system. Several countries including the USA have therefore tried to evolve NFE programmes which can take care of this specific requirement. In India this problem is confronted by the rural youth. No surprise then that it has been planned that the rural youth shall be taken care of by the integrated rural development programmes through schemes like the Nehru Yuvak Kendras or the NSS etc.

According to one estimate made by UNESCO the population of young illiterates in the group 15-19 was around 73 million in 1980 of which 60 per cent were females. If only India were being considered these figures would be staggering percentage-wise. The unemployed youth in India faces the other equally severe problem of a stagnant economy incapable of absorbing people anymore. In the coming years the technological revolution which has already taken place would merely compound the problem. The need for NFE would increase in no small measure over a period of time.

3. Adult Illiterates and New Literates

We have already noted that in India NFE is being linked with adult education. Howsoever much one may disagree with this kind of linkage, the Government has desired that the two stand linked and therefore they are. With an illiterate population of over 60 per cent it would not be very undesirable if the two are linked. The exact modalities of this linkage should be clearly defined. It may be remembered that India already has an extensive adult education programme. The awareness part of NFE can be taken care of by the non-print media like radio, television, etc. But the literacy, numeracy, etc., components happen to be common between NFE and Adult Education. Therefore, it would appear quite natural that NFE is asked to cater for the adults also. The neo-literates are yet another group of persons who need continuously a literacy revival effort or else they are likely to

revert to total illiteracy. Where else except at the NFE centres could one have this provision as well.

4. *Women and Girls*

The total percentage of literate women in India does not exceed 25 and the maximum drop-outs also belong to this category. If Purdah is one bane the obscuranist thinking about the code women should follow is another. This is one single reason why India remains a very backward country indeed. Having played a subordinate role for thousands of years the Indian women have come to accept discriminatory attitudes and biases.

It is therefore proposed that NFE programmes should help women to enter formal schooling and also complete their interrupted education.

Majority of Indian women work at home or are employed in doing monotonous jobs both as unpaid or low paid workers. In the organised sectors their achievements have not been very significant. For this section also programmes need to be organised and NFE with its elasticity and need-base could do a lot in this area. Not only that NFE programmes have not been arranged in this sector, they need more attention and greater degree of propagation. Part of M.P. model of NFE covers this sector of population as well. But this area needs more attention, patience, perseverance and imagination. After all women constitute half of India's population.

THE FOUNDATION OF NFE

In the opening chapter we have dealt with the logic and need of NFE. Here I propose to discuss its philosophical foundations. The very fact that the concept of NFE was developed in relation to the masses of the Third World Countries, of necessity its philosophical foundations must also lie there. The picture of the illiterate teaming millions wallowing in poverty and ignorance and facing the misery of living in a highly structured and ruthless society is hard to look at. Therefore, a few planners and administrators thought of developing the society in such a manner that the majority is made aware of their social-economic milieu and is enabled to develop skills to enrich and uplift their standard of living. The major constraint was therefore the lack of perception of formal education as a need amongst this class of people. "In India vast numbers of illiterates and semi-literates have lived for centuries alongside a highly literate, articulate, and reflective minority. This has been a fact of life which people by and large appeared to have accepted"¹. It was proposed that the 'twin objectives of development and liberation combined the possibilities of more practical gains'² and held out the possibilities of generating a strong impetus for education. Since the formal system was incapable of providing these in its institutionalised framework this challenge had to be met with non-formal methods and channels.

Against this background one can see the emergence of non-formal education as a respectable category of education. The additional important dimension may be added here of the

1. S.C. Dube in *Non-Formal Education and the NAEP*, Editors A.B. Shah and S. Bhan. p.4, OUP, 1980.

2. *ibid.* p.10.

question of the marginalisation of women as a result of modernization. Half of India's population and its actual requirements have been largely ignored by the formal system of education. The age-old perception of women as housewives has been seriously eroded by the knowledge that they work as agriculture labour, daily wagers in the organized and unorganized sector and that the majority of the women in the work force come from SC/ST class, are rural in origin and have no skill to meet the challenge of modern developments because of technological and other related revolutions³. Therefore, a slow and gradual demand of women to become literate is gaining momentum. They look upon NFE as their saviour and wish to be provided legal literacy as an important constituent of this literacy programme.

The over-all concern for the illiterate, unorganized and suffering masses has a long and distinguished history of philosophy. But the Manifesto prepared by Marx and Engels in the latter half the nineteenth century was the first ideological basis provided to voice the demands of this suffering section of humanity. Others joined in later viz the socialists, the humanists and even the spiritualists like Vivekanand with his concept of Daridra Narayan (The God of the Oppressed).

Non-formal education has two important ingredients that constitute its philosophy. One emanates from its humanism and the other from its extreme democratisation of the processes of learning. We have attempted to show that of all forms of education non-formal is one which is closest to the fundamentals of humanism. Karl Jaspers had remarked, "Achievement at a high level will always be a matter for a few individuals, for the elite who educate themselves. Yet the coming of humanism will, while scaling the summits, also have to discover the simplest forms which become approachable and convincing to everyone. An effective humanism would, in principle, have to be a humanism for all".

In the post-World War II period values have undergone serious transformation. Selfishness, avarice, greed and violence have become endemic to all societies. Welfare activities too

3. For detail see, *Social Change*, Sept. 1985, Vol. 15 No. 3, pp. 40-45.

have become pawns in the hands of the powerful few. In a world where tensions and split-personalities are the only truths available one could hardly, if at all, think of the down-trodden and the deprived. Where vast majority of people stand exploited, ignorant and destitute, to think of any programme without them is both inhuman and against Natural Laws of Justice. Millions of people in this country are in need of food and shelter. They live below a hypothetical poverty line i.e., they have no means to provide basic necessities of life for themselves. It is, therefore, no surprise to anyone if they cannot fend for themselves and neither obtain education which they ought to have had, had they not been so deprived. It is not to suggest that the non-formal programme is for them alone but any mass project could not survive by also ignoring them. In other words, by and large, the non-formal education is a welfare activity—an activity that could be planned only under humanitarian considerations. It is also a recognition that each one of us has the Divine in us. Each individual has the potential to realize what lies within him to realize. Therefore, whatever assists and helps Man to discover his inner self and achieve his ultimate should be the goal of any activity whether cognitive or affective.

The ancient Hindu philosophy accepts the law of integral harmony applying to the cosmic and the social order as well as to the specific course of development of each single individual. That is how *Dharma* defines not merely the whole order of the cosmos in its infinite levels and cycles but also the specific law of individual life (*Svadharmā*) which is much more perfect than that of another, however, well carried out. According to Mukherjee¹: "The Vedanta converts religion into ontology and fuses ontology with ethics through its identification of the self with God, Brahman or the All which it formulates as the supreme goal of life. It is hardly acknowledged that the Buddha had as his teachers, Yogis and thinkers of the Vedantic school, and for him the source and substratum of all things was the Incomprehensible, the One and the All as for the

4. Mukherjee, Radhakamal, *The Way of Humanism: East and West*, Academic Books, Delhi, 1968.

Hindu Vedantists Alike in the Brahmanical doctrine and the Vedantic system of the Bhuddha, the all-encompassing, transcendence or cosmic mind is the Supreme Reality beyond and above the unreality of the individual". As far as India is concerned the recognition that a society of complete Man alone would serve the humanity is of paramount importance. While attempting to help the individual, society is trying to help itself. This is a unique feature of this society and stands vindicated in any programme which aims at ameliorating the lot of the masses.

It is also important to acknowledge that for any mass programme to succeed it must take into account the supremacy of the individual over the collective. This should not create the impression that they are opposed to each other. In fact they supplement each other and also serve as complementaries. The superiority of the individual is there to feel and realize but as his functions are not possible outside of a social frame, they have a complementary role. For example, though aimed at improving the quality of life of an individual education is essentially a social activity in which the guardians of society determine the direction in which the society must move. Within this given frame an individual has a right to accept his role or decide that the assigned role is not in conformity with his view of life and, therefore, opt out of it. This choice to participate or to remain indifferent to the frame is what a humanist would expect and permit. However, this choice is subject to several conditions, one of them being an individual has no right either to destroy himself or the society he belongs to.

Humanism, as defined by Mukherjee, is "an integrated system of human meanings, goals and values and harmonious programme of human fulfilment, individual and collective. It seeks to clarify and enrich man's goals, values and ideals and achieve his full humanness through bringing him in ever deeper and more intimate kinship and harmony with the surrounding life, society and cosmos. It is obvious that humanism rests on 'value-realism' which is not abstract notion but involves the concrete fulfilment of human life and potentialities that is itself invested with the highest value by,

and for man's self. Mankind's universal experience at the level of both the self and society is that the real value of human fulfilment—the aim of all humanities—is supreme. This is connected by philosophy with the universal quest of being for unity, wholeness and transcendence"⁵.

The last few lines of the above quote are important for our purpose. Humanism as a philosophical system irrespective of its several interpretations, or schools, lays a great store by the dignity of an individual. This by itself enhances the value and esteem of the person. Also it presupposes, and rightly too, that each individual has a latent talent within him and he needs some means to realize it. Education, whether formal or non-formal, is one such means. Hence the importance of education under humanist school of thought. Besides fulfilling one's real role an individual has also to go beyond that. In other words, we have all to transcend the limits our bio-ecological constraints have placed upon us. It is important that an individual must not merely attempt to realize his talent or fulfil his assigned role. He must also transcend himself to some extent. It involves efforts—a little more effort than is normally undertaken but at the same time it is an effort to see that one progresses, develops and grows. The degree of progress, development or growth would be qualified by one's effort and inner motivation as perhaps also by the competence one has. That is, taken cumulatively, a society makes progress, develops or grows.

To a large extent, therefore, the volition of an individual in this regard is of great importance. Volition and choice go hand in hand in any system. If there are no choices permitted or offered volition plays a negligible role. A society in order to progress in all its manifold roles and functions must permit an individual 'will' to operate. We accept under the Hindu philosophy that the 'will' is given and in that an individual partakes of the Divine in himself. An individual's 'will' is like magnetism which propels an object towards his assigned role. At this point unless given choices no individual could perform his duty. This means though determinism

5. *op. cit.*, p. 1.

might remain the basis of everything done within that given frame of reference choices must be made and an individual must commit himself to achieve his extended 'self'.

The interplay and interdependence of 'choice' and 'will' could be understood against the background of Greek humanism which is essentially man-and-society-centred with the goal to bring order, harmony and beauty into the world. Man as well as Titan have their inevitable fall if they in their presumptuousness and folly challenge the beyond-human circumstances over which they have no control. Yet in that lies heroic majesty and grandeur in self-transcending man's Promethean defiance of the gods celebrated in Greek myth⁶. On the whole the stress of a blind transcendent force ruling cosmos and mankind is dominant. Man's worth and strength in Greek humanism is derived exclusively from his own resources, but he can rise to extraordinary heroic courage and determination in 'the vale of tears'. It has been suggested that the ancient values of freedom and individual dignity of Greco-Roman humanism have languished. Scientific humanism passes into militant humanism that seeks to solve the chronic contradictions and conflicts—of the social order by the tension of collective mass action and revolution. The Greek and the modern scientific-humanism are not entirely man-centred. To some extent the Hindu view of life is not very different from this position.

Julian Huxley has developed the notion called 'trans-humanism' emphasising the fact that human beings, if they so wish, could transcend themselves and enter into a new kind of existence by realising new possibilities of and for human nature. But he does not envisage that man could ascend higher and yet higher in terms of values and ideals of unity, wholeness, universality and transcendence through which alone he can, if at all, achieve a more and more perfect integration and harmony in the cosmos. In this connection it is said that modern evolutionary theory has yet to rise to new philosophical conception of man's freedom, unity and harmony at the transcendent dimension. Philosophical humanism seeks to

6. op. cit., pp. 93-95.

replace evolutionary humanism by evolutionary transcendence.

Non-formal education has not developed or evolved its own philosophical understanding. It merely furnishes conditions under which an individual could challenge 'the societal fate' as it were. It believes in the essential superiority of an individual who has within himself the potential to exceed himself and the limits he has been placed under. Therefore, the choices though made available through an establishment, the individual has freedom to think, will and choose. In the words of Mukherjee: "Humanism rejects the sterile logic of an outgrown naturalism that reduces human meanings and experience that is externally controlled and determined. It discards a naive and opaque psychologism that distorts the self of man, its unity, harmony and transcendence and the values and possibilities of the self-in-relation to mankind and the cosmos-as-a-whole. It reveals the total self of man with its functions, meanings and values at the three successive dimensions of the environment, physical-biological, psycho-social and ideal-transcendent. It hence formulates a general philosophical rather than psychological and sociological view of the self in dynamic, multi-dimensional relations to fellow-man, to the universe and to values"⁷.

We have also stipulated that non-formal education is free from any specific goals which in turn means that goals in this case would be governed by purposive orientations that individuals have. It would be relevant to recall European tradition of Humanist thinking. Three component ideas in this product are significant to Humanist thinking in the West: (1) The universe is purposive throughout; purpose is built into the structure of everything. (2) Men are free to conform to or defy this purpose, but not to alter it; and they doom themselves to futility, and nullity or worse, by failing to conform. (3) The temporal order of nature is in some sense inferior and illusory, secondary to an eternal order that is ultimate reality⁸.

In the general order of things the meaning and significance

7. op. cit., p.5.

8. Huxley, Julian (Ed.) *The Humanist Frame*. George Allen and Unwin Ltd., London, 1962.

of each action lies hidden. It is beyond the ability of Man to redefine or redesign anything basic. In the ultimate analysis the only course open to him is perhaps to conform. Even so he has not been denied the right to conform or not to conform. The will to conform or stand independent of it is basically human. Man has the ability to learn from experience pursuing rational methods. This learning from experience and the ability to learn are the cornerstone of the Humanist thinking whether Western or Eastern. Man can learn which means he can modify his behaviour, rise above the level he finds himself originally but this learning has its own limits imposed upon itself. Everything cannot be learnt and neither can everybody learn. A man can realize his potentialities and transcend himself but both have their own frames of reference. By realising oneself maximally does not suggest the possibility or hold the promise that he could transcend himself. Even when one does transcend he does not do so at the cost of losing himself. One remains what one was while one transcends the limitations imposed upon one. Where one transcends oneself are the given limitations and not the human frame—whether of thought or of power.

All that we have attempted to explain has very succinctly been put by Goethe when he said: "Man carries within himself not only his individuality but all of humanity; with all its potentialities, although he can realize these potentialities in only a limited way because of the external limitations of his individual existence"⁹.

Within this context one cannot think of any other approach to education except the non-formal. The formal is stifling and barbarous. It seeks obedience and order. It admits of no freedom. The choices are already made and society has desired that an individual must conform himself to an elitist logic and system. What society deems desirable is neat labelling, categorisation and classification of human achievement and not of the latent potentialities. The society grants everyone a chance and when one fails the opportunity is never repeated. Against this background the non-formal is freedom where no classifications are ever done. True, the society itself has granted another

9. Cited in From Eric (Ed.) *Socialist Humanism*. The Penguin Press, London, 1967, p. ix.

opportunity, provided an alternative but surely there is a hidden stigma attached to it of being an alternative. It is the second best technique/means to improve one's lot and not the exclusive one which society prefers to call formal. Herein lies the challenge to overcome the handicaps already built into this system, and also of putting the same on a par with the favoured system.

The very proposals that links be established between the formal and non-formal and bridges be created between the two and also that the formal should permit multiple-point entry besides dropping its rigid posture and the classification system, are indicators that moves are afoot to provide accommodation to the non-formal and possibly same respectability as is accorded to formal. Ideological adjustments are being made already, and, therefore, we have all the more reason to appreciate the grounds on which the probable is being made possible.

THE GOALS AND THE SCHEME

The scheme of non-formal education was launched in 1979 after a group of experts had gone into its details. From their side they prepared an outline of the scheme and suggested that it may be launched at first in the so-called nine educationally backward states. We have already made a reference to this fact in the first chapter.

As a background for this scheme the Government of India acknowledged the huge backlog of illiterates in the country and also the continuous addition of this type every year. The policy decided upon was: every child shall continue to learn in the age-group 6-14 on a full-time basis, if possible, and on a part-time basis, if necessary. In 1977-78 it was estimated that 898 lakh children were enrolled in Classes I-VIII. The hardcore of non-enrolled consisted of children from weaker sections of society including the scheduled castes and scheduled tribes, landless agricultural labourers and urban slum-dwellers. The reasons for this class of children not feeling attracted to teaching in the formal schools are well-known. Children of this class have to start working early in life to augment family earnings or help in the daily chores of the household. It would never be very easy to help these children in the formal schooling system and therefore non-formal education was thought out to be the only answer to this formidable problem. In brief, the NFE was initially conceived as a supplement to the existing formal education.

As far as the target group for NFE was concerned 160 lakhs of non-enrolled children or 50 per cent of the target for 1978-83 constituted the clientele, comprising 120 lakhs in the primary stage (Classes I-V) and 40 lakhs at the middle stage (Classes VI-VIII).

The strategy declared by the Government for the universalisation of elementary education in the country was to expand and improve formal schools and provide a massive non-formal part-time education covering the needs of various target groups both in the sparsely populated areas as well as elsewhere. The target group was meant to cover children from weaker sections, girls in the age-group 6-14 and boys and girls (generally boys) who need only part-time education because they are already employed in doing small jobs.

The scheme contained the definition of the objectives as well. They were:

- (a) To help the educationally backward States, namely, Andhra Pradesh, Assam, Bihar, Jammu & Kashmir, M.P., Orissa, Rajasthan, U.P. and West Bengal in developing and implementing programmes of NFE for children in the age-group 9-14, so as to enable them to cover the huge size of non-enrolled and non-attending children under the school system;
- (b) To help them in developing institutional structures at various levels not only for quantitative expansion but also for the improvement of the quality of education;
- (c) To help them in developing group-specific and local-specific curricula and instructional materials so that education at the elementary level is more meaningful and relevant to the life situations and needs of the children; and
- (d) To help them improve the teacher competence at the elementary level even in the remotest areas of the country.

The scheme did not envisage any new or separate administrative set-up for its implementation except for the suitable strengthening of the existing set-up wherever found necessary. It stated "through this chain of institutional structures; academic inputs will be prepared and instructional packages delivered to the NFE centres located in various areas in the states".

The role of the Ministry of Education at the centre in this programme, as envisaged in the scheme, would mainly be the

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over all administration of the scheme, keeping a watch over its implementation and utilization of funds and coordination of the activities of the various agencies in this programme. "The programme will be implemented by the Ministry through the NCERT at the centre which shall provide academic guidance and support necessary to the State Department/Directorates of Education and the SCERT in the State. The interdisciplinary team in the NCERT which has been working on the UNICEF assisted projects will be deployed to this programme so that the teams' guidance is available throughout the period of implementation".

The scheme had the provision of the feedback as well and it was therefore provided that it will be "in the reverse order from NFE centres to the block level, district level and state authorities and finally to the centre".

The state medium-term plans of the nine States proposed non-formal coverage which is given below. However, this coverage does not conform to the recommendations of the Working Group.

Table-1

State	Additional Enrolment 1978-88			Non-formal Coverage		
	6-11	11-14	6-14	6-11	11-14	6-14
Andhra Pradesh	19.39	6.72	26.11	9.44	2.22	11.66
Assam	8.51	5.72	14.23	2.52	2.86	5.37
Bihar	12.26	15.53	27.79	2.52	4.68	7.15
Jammu & Kashmir	3.41	0.75	4.16	0.35	0.16	0.51
Madhya Pradesh	24.27	9.21	33.48	—	—	12.56
Orissa	6.53	8.20	14.73	0.80	4.96	5.76
Rajasthan	20.33	7.97	28.30	10.17	3.98	14.15
Uttar Pradesh	29.06	12.75	41.81	20.55	7.15	27.70
West Bengal	16.56	10.63	27.19	5.00	3.96	8.96
Total	140.32	77.48	217.80	51.34	29.92	93.82

The Working Group had computed the working cost of these centres and therefore they had given an estimate of the total expenditure on the NFE centres. The non-recurring grant

per pupil was to be Rs. 15/- for the entire plan period. The total cost of setting up and running 500 centres with a total pupil coverage of 21,250 at the primary stage would be Rs. 25.80 lakh during the 1978-83 period which works out to be about Rs. 122 per capita. Similarly, the total cost of setting up and running 700 centres at the middle stage with a pupil coverage of 22,500 would be Rs. 42.37 lakhs or Rs. 186/- per capita. A total amount of Rs. 39.48 crore has been estimated (Primary Rs. 29.61 crore and Middle Rs. 9.87 crore) for setting up and running NFE centres in all the nine educationally backward States.

NFE Models

Having seen the scheme and learnt its objectives we now come to various models which became operative after the implementation of the scheme. The M.P. model and the CAPE scheme were already in operation before the working group made its recommendations. The UNICEF assisted programmes run by a department had the first experience of running an NFE scheme before it was formally implemented.

Flexibility, as is evident from the previous chapter, is an important characteristic of non-formal education in India. This flexibility is reflected at each stage and in each and every dimension of the programme. Since the programme is being run for three different clientele, a variety of models have been evolved which are being adopted/adapted in various States. The three clientele for which the programme is being run are as follows:

- (a) Children of the weaker sections like the Scheduled Castes, Scheduled Tribes, those in hilly areas, tribal urban slums and other economical backward rural areas.
- (b) Girls in the age-group 6-14 who are not attracted by the existing programme of education being offered by the formal elementary schools. These girls may generally not be interested in joining the formal schools at any stage. Thus, they would need an educational programme tailored to suit their requirements as housewives, mothers and citizens.

(c) Boys and girls (generally boys) in the age group 6-14 who are employed in professions like carpet-weaving, pottery, etc. These children need only a part-time programme of general education which may be focussed around literacy and citizenship training.

Academic Models

Since the programme is being run at two different levels viz., national level and state level and the voluntary organizations are also making significant contributions towards it, a number of academic and administrative models are in operation. Besides the programme, some significant experiments are also being conducted which have evolved their own models. The most important of them are UNICEF aided project 3 viz., Comprehensive Access to Primary Education (CAPE) and UNICEF aided project 5 viz., Developmental Activities in Community Education Participation.

CAPE—Comprehensive Access to Primary Education (CAPE) is a UNICEF aided project which is being run by NCERT in collaboration with SIEs/SCERTs and UTs. It aims at development of non-formal system of education to evolve flexible, problem centred and work-based decentralised curricula and learning materials (learning episodes) relevant to the need and life situations of diverse groups of learners. These learning episodes are being developed through training-cum-production mode for the children of 9-14 age group. This material will be used in the experimental learning centres to be established/adopted in States and UTs. At the final stage, evaluation centres and accreditation services will be established in States/UTs to help children getting certificates for their academic achievement. During the year 1979-80, the project was launched in ten states and three UTs. At present it is being run in all the States/UTs except Tripura, Arunachal Pradesh, Dadra and Nagar Haveli and Pondicherry.

The project is in its first phase development of the material. Second phase has to start which will be followed by the third phase i.e., accreditation services which is to be started shortly.

The project focussed upon school children from the disadvantaged populations, scheduled castes, scheduled

tribes, backward classes and girls. It is also meant for slow learners from the formal schools. The age group of the children covered under this programme is 9-14 years.

The main features of the curriculum are relevance to the needs, flexibility, local specificity and close relationship to SUPW. Firstly problems were identified at the local places where the children live and on the basis of the information collected the learning materials in the form of self-contained and independent learning units have been prepared. Such learning episodes are developed, keeping in view specific expected behavioural outcomes (EPOS) which will cover about 1,200 hours of learner-engaged time. This period is divided into five working days. For the middle stage also the child will require additional 1,200 hours (five semesters each of the length of 120 working days) to acquire the competencies expected at the end of the middle level. The CAPE group of Department of Pre-School and Elementary Education, NCERT acts as the Central Resource Centre. It coordinates and monitors their activities. Regional Decentralised Resources Centres (RDRCs) have been established in SCERTs/SIEs. Administrative support for implementation of the project at the block level is obtained from elementary teachers training institutions/in-service training institutions.

2. Developmental Activities in Community Education and Participation (DACEP)

Role of community in the non-formal education programme has received considerable attention of the researchers and field workers. A community based project with the title DACEP has been taken up by NCERT in collaboration with SIEs/SCERTs in States/UTs. It is a UNICEF assisted project. In this project an attempt has been made to develop and test various educational activities to meet the additional needs of pre-school and out-of-school children, young girls and women in selected communities and to increase the participation of the community in formal and non-formal education programmes. Useful and relevant skills are also being given to the members of the community outside the formal system of education and to use the resources available with different agencies of the community

for educational purposes.

The project was started in 1975-76 in thirteen States and two UTs. During 1976-80 i.e., the first phase, two centres were established in each of these States and UTs. Instructional materials were prepared for the out-of-school children and also for general education of girls and women. In 1981, more centres were opened in these States and UTs and nine more States and five UTs were added to the list. At present 102 community education centres are working under this project.

After doing a survey of socio-economic conditions of each of the communities, the instructional material was developed with the help of the local community and teachers in which various developmental departments were involved. There are four target groups. For the first target group i.e., 03 and mothers, the centres coordinate basic services for health living of childrens and the expectant and lactating mothers. Instructional materials for mothers have also been developed. It is also being used as the base literacy and numeracy material. The materials for 3-6 age group takes care of the need to promote school readiness among children and education of their parents. The material for the age-group 6-14 helps children reach specific levels of achievement to enable them to get entry into the formal system. Instructional materials for the girls and women of 15-35 age-group make use of participation of learners in developmental and productive activities for teaching literacy and numeracy.

The number of learners in each centre is 105. This programme has helped in increasing the literacy role in the community.

The NFE programme is being run at two levels—lower primary and upper primary. At the lower primary level there are vast differences in various models but at the upper primary level, most of the states are following the integrated approach so that the NFE system may truly be complementary to the main stream. In a recent meeting held at the National Institute of Educational Planners and Administrators, a few models viz., M.P. model, part-time evening schools, IIE Pune model, integrated model CAPE model, work oriented model and awareness-based models have been identified. To add a few to this

list need-and-problem based approach for competency based model and use of massmedia for reaching such children in distant areas may also be included in this list. Let us look at some of these models so that various types of administrative set ups for them may also be discussed.

3. The NCERT NFE programme—A Need and Problem Based Environment Oriented Approach

In 1977, a high level planning group met and assigned a specific role to NCERT which says, "The role of the Ministry of Education at the Centre in this programme would mainly be the overall administration of the scheme keeping a watch over its implementation and utilization of funds and coordination of the activities of the various agencies in this programme. The programme will be implemented by the Ministry through the NCERT at the Centre which shall provide the academic guidance and support necessary to the State Department/Directorate of Education and the SCERT in the State".

At the instance of a committee report, the Ministry of Human Resource Development (The then Ministry of Education and Social Welfare) initiated a programme of NFE in the nine educationally backward States. For this a need and problem curriculum was prepared and making it the base, a lot of instructional materials (primary level) was prepared in six languages, viz—Hindi, Urdu, Telegu, Assamese, Oriya and Bengali. While the material in Hindi and Urdu was prepared at the centre level, the instructional and other material in regional language was prepared at the State level with the help of Regional Colleges of Education, Field Adviser's Offices and other State Departments of Education. This material was prepared for four types of clientele viz—urban children, rural boys, rural girls and tribal children.

The NCERT opened 228 NFE centres in different socio-geographical areas. One instructor (preferably local person) was appointed for each centre with a strength of 25 children. The minimum qualification for these instructors was high school pass. These centres were run for two hours depending upon the convenience of the children. One supervisor was appointed for every forty centres and training of these

instructors and supervisors was held at the block and the district level. These centres were opened in 1978 and continued till May, 1980. Since these centres were run on an experimental level, after the programme they were either handed over to the States or closed down.

For the NFE programme at the middle level NCERT has started developing instructional materials for the Hindi-speaking areas through the integrated approach. For this material work books, training manual, and other supplementary materials are also being developed.

M.P. MODEL—M.P. model was originated from the Madhya Pradesh experiment which was a total innovation within a Gandhian framework. It has as its basis craft, whereby the poor can both earn and learn. It may be recalled here that a vast majority of Indians are too poor to value education for itself; overcoming hunger is the basic requirement. Consequently the present innovation meets both their primary and the educational needs. Universal education seems far away, so against this background the Madhya Pradesh experiment has the blessing of all sections of society.

Madhya Pradesh is one of those nine States in which the literacy rate is below the national literacy rates (28.72 per cent in 1981). The decision to introduce a 'learn-and earn' programme was taken by an enlightened bureaucracy. They took into account the handicaps Gandhi's scheme suffered from. The first problems that they attempted to resolve were—(a) lack of finance to support a vocationalisation programme, particularly for the purchase of material and the payment of stipends to students for their work; (b) lack of outlets for the sale of finished goods; and (c) a shortage of motivated staff. They were quite hopeful that in the economically weaker sections of society they would be able to generate both meaningful motivation and the resources to finance universal primary education.

The first phase of the programme started in 1975. Fifty centres were opened in ten districts where the literacy rate for girls was very low. The second phase was started in July 1975 during which 45 centres one each under the guidance of Basic

Training Institutions were opened. Only those children who never went to school or dropped out of the school at least a year back were enrolled in these centres so that the children from the formal school do not join these centres.

The curriculum prepared for this specific programme is integrated for the first level i.e., from Class 1-5 and is divided into 18 units with specific evaluation system assigned to each of them. The material for Class 1-4 has been condensed but for Class 5 no such condensation has been done. The children of these centres appear in the Class V examination along with the children of the formal system.

While the district level centres have 20 students, the centres of Basic Training Institutions have 30 students. There is only one instructor at each centre.

"Earn while you learn" scheme has been in operation in Madhya Pradesh for the last 3 years. The scheme has been introduced in NFE centres also. The NFE children produce chalk-sticks, tat-pattis and uniforms and for this, they are given cash-remuneration. The District Education Officer makes necessary arrangements for lifting the produced goods from the centre and distributing it to the schools under him. The receipts of acknowledgement of the items are sent by the District Education Officer to the Directorate and to the K.V.I. Board as well.

Other programmes outside the formal system of education include continuing education centres, functional literacy programmes for farmers, functional literacy programmes for adult women, integrated programme of child development services, condensed course for adult women, Nehru Yuwak Kendra etc., which are for various clientele and age-groups.

INDIAN INSTITUTE OF EDUCATION, POONA MODEL—An action-research project has been launched by IIE, Pune in five selected agro-climatically different areas in Pune which by type (area) are drought-prone, hilly with heavy rainfall, hilly and semi-tribal, fairly well irrigated but not advanced and well-irrigated and semi-industrial. This scheme was originally conceived by the late Professor J.R. Naik, the founder of the institute.

A base line survey conducted in 1979 showed 19,635 enrolled

pupils and an estimate of 19,373 non-school going children in the 6 to 14 age-group. For this group part-time non-formal classes have been organised. The accommodation for such classes has been provided by the community (and lighting also wherever it was possible). Local persons functioning as part-time teachers would help the community to manage the class better. The scheme says that each class had 20 children and was organized on 300 days in a year. About three quarters of the curriculum is orally transmitted to the children. It was decided to use about a thousand "easy-to-grasp" four-page folders and booklets to cover the curriculum. Emphasis is on self-learning and peer-group learning. Proper attention is paid to the preservation of local ethical and cultural tradition while inculcating attitudes of cooperation, scientific inquiry, self-confidence and self-reliance. The classes give the impression more of a club than a school.

Children belonging to 9-13 age-group were admitted to these classes. At the institute a team of project officer (administration), training officer, material production officer and a research assistant worked for the project. These project staff and village leaders together selected teachers for ninety classes (46 of which were farmers, 10 were labourers and the others were artisans or unemployed).

By the end of January 1980, all the classes were in full swing with an enrolment of 1,434 pupils—1,080 girls and 354 boys. The monthly honorarium given to these teachers was Rs. 50/- per month. These teachers received training in the central village of the area (from 11 a.m. to 5.30 p.m.) for five days every six weeks which aimed at helping them to understand the problems involved in Universalisation of Elementary Education, acquire the skills of organising NFE classes and also use pedagogical techniques effectively. A circulating library was also arranged for the teachers in each project.

The curriculum was analysed in terms of units and new units relevant to the pupils' environment were added. History, geography and science have been integrated. In teaching of literacy and numeracy the functional aspect has been emphasized. Stories, songs and simple yogasans help working children

in relaxing after the days' work; celebration of important events like Independence Day, Gandhi Jayanti, etc., help in developing social awareness.

An integrated package of teaching-learning techniques and materials helps in promoting self-learning through learning games, peer-group interaction and co-operative evaluation by the pupils' themselves. For teaching of functional literacy and numeracy different sets of cards are being used. The primers used initially were later on substituted by three sets of reading cards which used local themes and idioms. The reason for doing this was to bring the content closer to the rural situation. The children are encouraged to observe natural phenomena, vegetation, birds, soil and rocks, sources of water, food for the villages etc., to know about their villages and describe such things during the class. They are also encouraged to collect various specimens and classify them.

In addition to daily assessment Bal Jatras are organised where children present songs and dramas and after that their achievement is tested. Graded tools are used for evaluation of literacy and numeracy. During Bal Jatra of June 1980, the pupils were tested to find out how many of them had crossed the illiteracy barrier. During Bal Jatra in December, 1980 it was found that 53.14 per cent pupils had adequately mastered reading skills in about one year out of which 30 per cent could "sight-read" fluently while 47 per cent were "barely literate". 170 pupils were still at the age of learning alphabets. At the end of two years about 75 per cent pupils from this batch had gained literacy and numeracy. Out of the total of 1,434 pupils, about 1000 continued until the end of the classes. After the final test only 76 children (mostly boys) desired to take the formal examination of Grade 4. Girls were still not attracted by the formal schooling.

The Administrative Models for NFE

No scheme can function well if it is not adequately supported by informed and committed bureaucracy. Even the best of schemes developed and planned with perception would fail to deliver the goods if it lacked administrative support. Therefore, it is only logical to think of the administrative set-up which

could serve as a model for NFE.

In a seminar held in April 1984 at NIEPA (National Institute of Educational Planners and Administrators) three models were suggested for the effective running and implementation of NFE scheme. Each model had its own rationale as well. We may recall here that formal education has been with us for countless years. The adult education in its present form is also much older than NFE. The NFE being the latest entrant to educational provision must also have administrative support model for the formal system. We are also familiar with the machine which looks after adult education. The question therefore is whether NFE should have a distinctly different administrative support or share it with the formal or the adult education separately or be made an adjunct to both. This is one good reason why rationale must be given before every suggested model.

MODEL A: Administrative Model having a Common Set-up for NFE and Adult Education

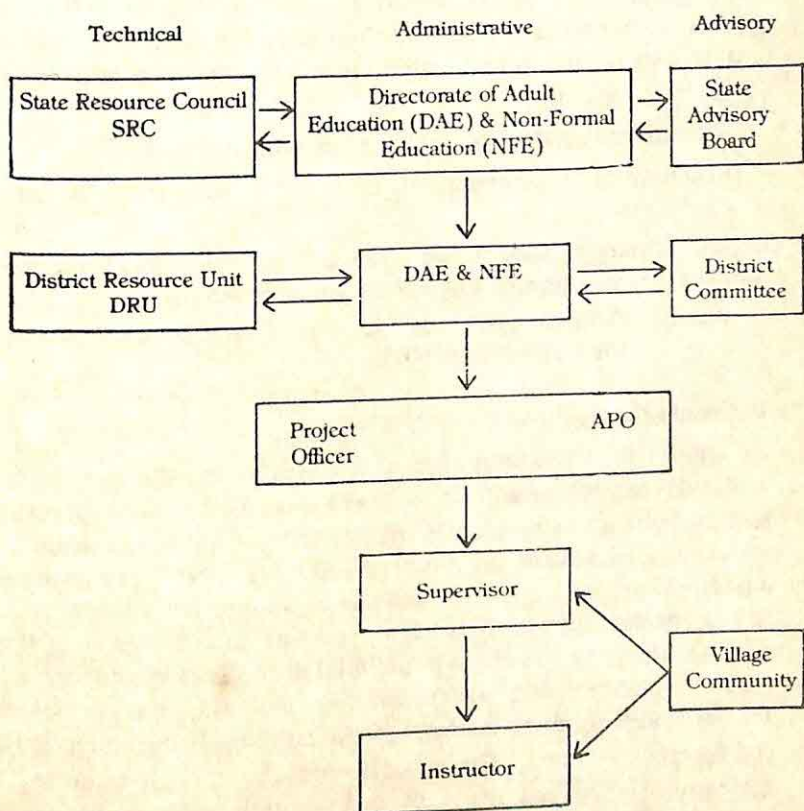
Rationale: The reason behind suggesting this model is simple. The formal education by all measures has failed to deliver the goods. An administrative machine which has already failed to gear itself upto providing adequate education to all cannot and should not be saddled with the responsibility of running a highly innovative scheme. One can foresee numerous difficulties in this arrangement. Chances are that the administrative set-up already used to certain practices would not be appreciative of schemes like non-formal education which are highly flexible in approach and futuristic in outlook.

Additionally, it is possible that the elitism which is so characteristic of formal education would enter this area as well. The clientele of non-formal education and adult education are both engaged in productive work which is not true of those who go in for formal education. It is therefore essential that on these two counts alone the NFE programme may not be handed over to the existing staff of formal education.¹ Instead, the NFE and Adult Education programmes can be handled by a common set of people but decidedly not by persons who are dealing with traditional programmes like formal education.

The obvious model shall therefore constitute the clubbing of NFE with Adult Education as far as the structure and support of both these programmes is concerned. The seminar had suggested "that non-formal education for all the beneficiary groups should adopt a project approach which is necessary owing to tagging of NFE with Adult Education. This would eliminate the possibility of a defused state of NFE programme and improve the chances of it being supervised and monitored in a better way. As all the blocks of the country have to be covered by 1990, it is hoped that there will not be much time lag between demands and the provision for them".

The structure suggested was as follows:—

MODEL - A



This model provides for the position of a Director who would be incharge of these projects at the State level. He would be supported by two deputy directors one for planning, budgeting and administration, and the other for the preparation of materials, training and coordination. These deputy directors would be supported by two additional officers of the rank of assistant directors out of whom one would look after development work, Sharmik Vidyapeeths, Voluntary Organisations etc., and the other would undertake monitoring and evaluation work. An accounts section with an accounts officer is an absolute necessity to any new set-up.

At the district level there should be one person incharge both for NFE and DAE for planning and coordination with other agencies. At the actual project level the project officer or the programmes officer would look after 200 to 500 such centres. In his work this officer shall have the support of assistant project officer and the supervisor. He must cover at least 40 centres a month.

The instructor shall be incharge of both AE and NFE.

Community involvement in both NFE and DAE is very essential.

Initially it may be sought but a regular inflow of this cooperation is a healthy sign of any successful programme.

MODEL B: Administrative Model Having Common Set-up for Formal and NFE.

Rationale for the Model

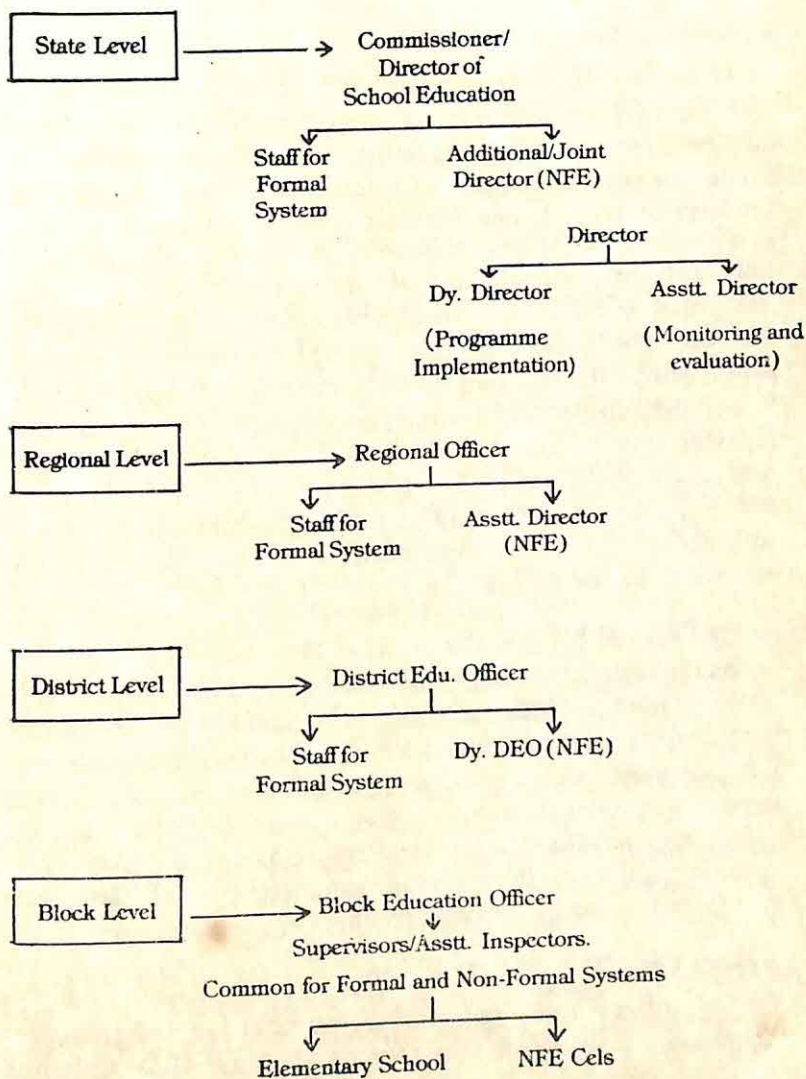
The NFE programme for the children in the age-group 9-14, who are out of school has been accepted as an important part of the strategy to achieve the objective of universalisation of elementary education. In almost all States the NFE programme has been developed as an alternate supportive programme to the formal education system. As far as the objectives of the scheme, clientele and the instructional procedures are concerned both remain similar, except for the fact that the courses in the NFE are condensed forms of the courses being offered in the formal system. The Adult Education programme is addressed to the age-group 15 to 35 and the aims of the same

are development or literacy skills, social awareness and functional skills. The psychology of the adults, is also different

MODEL - B

Organisation & Structure of NFE

Organogram



from that of children. Consequently, whereas the formal system is closest to NFE, the Adult programme is not. It is, therefore, in the fitness of things that Adult Education set up should be different from the NFE and the formal system. At the same time it is desirable that the formal and non-formal education is administered by the same set of people. The organisation and structure of NFE is given on page 35.

At the State Level

In the Seventh Five-Year-Plan non-formal education is being taken up by States as a massive programme to be implemented on a large scale. It has, therefore, being found necessary to create one post in the cadre of Additional Director for NFE in the large States and Joint Director in small States to be assisted in the turn by a Deputy Director at the State level. The main functions of Additional/Joint Director NFE will be to implement and monitor the NFE programme at the State level. For example, overall planning of the programme, release of funds, getting the teaching learning material reviewed, collection of data and issue of instructions from time to time to the regional and district level officers. The Deputy Director will assist Additional/Joint Director NFE for the overall implementation of the programme. The Assistant Director NFE will be responsible for monitoring, collection of data and evaluation of the programme.

At the Regional Level

At the regional level the regional officers will look after the work relating to NFE programme in addition to the work relating to the elementary and school education. The Assistant Director NFE attached to the regional officer will assist in the implementation of the NFE programme in the districts falling within his jurisdiction. The regional officer must also give necessary guidance in planning and execution of the NFE programme at the district and block level.

District Level

The District level officer plays a crucial role in the implementation of the NFE programme because it is he who

identifies places for locating NFE centres, selects instructors and appoints supervisors for monitoring the programme at the grass-root level. He has also to purchase materials and supply the same to the NFE centres. In view of the fact that DEO has more work than he can cope with, it is suggested that he may be supported by one more officer in the cadre of Deputy Education Officer meant exclusively for NFE programme so that the latter may be able to attend to the routine work relating to this programme in addition to the planning, monitoring, evaluation and coordination with the training institutions.

Block Level

Since block has been accepted as the basic unit for planning, administration and monitoring of elementary education programme and since the content and methodology in NFE centres and formal schools are similar it is advisable that supervisors for the NFE centres may be drawn from the cadre of inspectors of formal schools. It is also suggested that supervisors for the formal schools NFE centres should be common because thereby there will be more coordination between the two and the supervisor will be able to cover more centres spanning into the evenings and day time. The exact number of supervisors and inspectors cannot be determined in advance and, therefore, a flexible arrangement is being envisaged.

The present model would become functional if the rate of Rs. 180 per centre per annum approved by the Government of India is increased to Rs. 350 per centre per annum to meet the increased cost of supervision. Similarly, the work-load as fixed by the government be reduced from 40 to 30 in the plains areas and 20 in hilly/tribal areas.

The minimum qualification prescribed for a primary level instructor may be matriculation, however in exceptional cases this qualification may be relaxed to middle pass.

Each State government should establish resource centres attached to SCERT/SIE for the purpose of developing teaching-learning material and to provide training for feed functionaries, namely, supervisors, instructors.

It is also found necessary that bridges may be created between non-formal and formal system. The children who have dropped out of the elementary schools may be allowed to undergo a two-year course and permitted to enter the formal school. Similarly, those who wish to leave formal and come to NFE may also be allowed. The two-way traffic between formal and the non-formal is advisable on several counts. The biggest advantage is that part of the rigidity in the formal system would be taken away and part of the informality in the non-formal sector would wear out so that children of both systems become equally acceptable to the community at large.

At the NFE centres it is being suggested that children may be provided with light refreshments, clothes, books and writing material free of cost. These incentives always do not work for example in the tribal belts such incentives have not worked at all. Some other types of incentives for tribal children will have to be given for example, play material such as drums or painting material etc., may be provided at the NFE centres to make such centres attractive.

MODEL C: Integrated Administrative Model with Common Set-up for Formal, Adult and NFE.

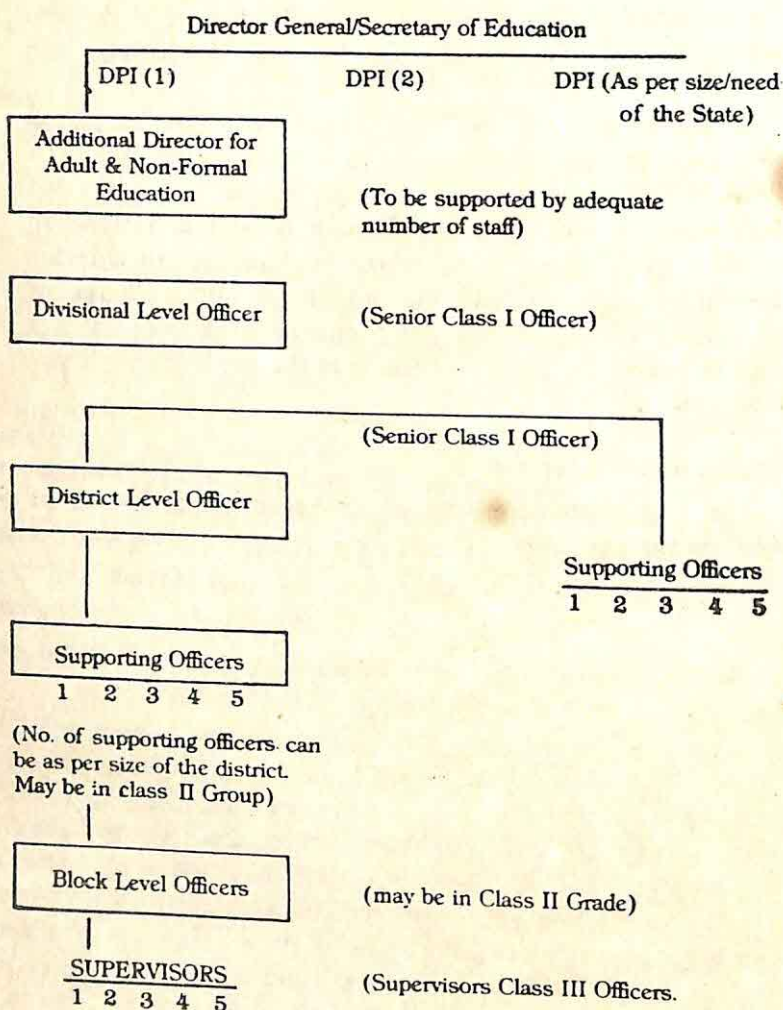
The Rationale for the Model: Education as being practised in many societies has become identical with formal education. The single channel instructional system being operated for young learners has become untenable if education were to be defined as a designed social process intended to bring about socially desirable behavioural changes in all those who desire them or are in need of them. Several adjuncts to and alternatives of formal education have been conceived and propagated for the simple reason that the left-outs and the drop-outs belong to several age-groups. In addition there are persons who need education as part of their social awareness programme or personal edification. The NFE, the Adult Education and the continuing education programmes etc., are all such forms of alternatives which are often regarded as competitive systems of instruction. A school of thought exists which does not consider this competition very wholesome or desirable. After all, the function of all types of education is to improve

one's quality of life by providing skills that of in demand and knowledge which helps one to think adequately and reasonably.

A model is therefore being presented which has all the three areas of educational activity as an integral whole and it is possible to activate it in a single frame. It assumes that there would be more than one Director of Public Instruction working either under a Secretary of Education or Director General of Education with one additional DPI incharge of non-formal education and adult education. All this staff has to be rationally supported according to the needs of the State/Block, etc.

Organisational Structure

The Organisational Structure is suggested in the Chart given on the next page.



(The number of supervisors will be as per size of the Bloc 1, each supervisor may be given 20 formal schools, 10 Adult Education Centres and 10 NFE Centres for guidance and supervision)

RESEARCH IN NON-FORMAL EDUCATION

Under innovative practices researches in NFE have been reported in NCERT and UNESCO documents. In the past few years interest has been generated in this area but very few research studies have been conducted in NFE proper in this country. A few such studies being conducted are in the process of preparation and therefore it is extremely difficult to report on them. At the NCERT level evaluative criteria are under preparation which may show to what extent the work at the NFE centres has been successful. Important as these studies are they would merely show the extent and degree of the success of NFE centres e.g., which centres are operationally viable and which are not and the reasons thereof. We shall present a few criteria for the evaluation of NFE centres. But before we do so let us have a look at some of the researches already conducted in the West. The idea is to help our readers to formulate research projects under these titles for application in the country. These research studies are cited by Philip G. Altabach and others in their book:

Comparative Education brought out in 1982 by MacMillan Publishing Company, USA, pp. 355-360.

- (1) *Attacking Rural Poverty*, Johns Hopkins Press, 1974.
- (2) *The Impact of NFE on Income in Industry* by T.J. La Belle, Cinidad Guayna, Venezuela, 1974.
- (3) *Educational Alternatives in Latin America: Social Change and Stratification*, University of California, 1975.
- (4) *The Economics of NFE: Resources, Cost and Benefits*, Praeger, N.Y., 1975.
- (5) *Lords and Peasant in Peru: Paradigm of Political and*

Social change, Cambridge, Massachussets, Harvard University Press, 1970.

- (6) *Studies in Educational Change*, Toronto, Holt, Rinehart and Winston, 1972.
- (7) Non-Formal Alternatives to schooling for the world's Minorities, School of Education, University of Connecticut, 1972.

In India the only research work reported pertains to a Ph.D. conducted by D. Victor at Andhra Pradesh, Waltair, 1985. The title of the study is: A Study of the Dynamics of the Problems Facing the NFE Centres in Srikakulam, Vizianagram and Vishakhapatnam districts of A.P. However in almost all universities a study or two is being taken up but it would take a few years before all this work can be systematically reviewed. The Third Survey of Educational Research (1986)—an NCERT publication merely clubs NFE with universalisation but mentions no study.

A few areas are being suggested for future work. The areas are only suggestive and the formulation of topics tentative.

1. AREA: *Clientele*

Several studies are possible under this category. For example, the clientele in urban and rural areas is bound to be different, therefore, separate studies on each is possible. The formulation of the topic could be: An investigation into the student population of NFE centre at. . . One could examine or explore their i.e., socio-economic status, their family histories, their aspirations and the reasons for their opting out fo the formal system or joining the NFE.

2. AREA: *Courses of Study*

NFE programmes do not have any uniformity of courses of study, except for a few reading units prepared by NCERT, others study reading material prepared by the State Government or the SCERT or the concerned department of education. The qualities, details and even parameters of these materials can be gone into detail. For example, one topic could be: An

indepth study of the language material for the beginners in NFE centres. Similarly, the other topic could be: An inquiry of the 'Social awareness content' of NFE materials; or for that matter 'Skill-related content of NFE materials'.

3. AREA : *Retention and Drop-outs*

An interesting area of research could be the problem of retention and drop-outs from the NFE programme. It may be remembered that the rate of drop-outs from NFE centres is also significant. The retention rate here is decidedly higher than in the first two years of primary education in the formal system. But both on retention and drop-outs we do not have exact figures, just as we have no list or weightage in reasons why this phenomenon at all operates in the NFE programme. The suggested example of a topic would be: "Causes and problems of retentions/dropouts in NFE centres—an investigation into 5 centres from X region".

4. AREA : *Models for NFE Programme*

Different types of NFE programmes exist in the country. While a few successful models have already emerged, numerous others have not succeeded. At least in the case of several NFE projects it has been found that the initiative taken by the State Government or a member of State/Central legislature has acted as a fillip to their success. It is therefore possible to investigate the nature of such initiatives and discuss the dynamics of success. Therefore, a possible topic of such an investigation could be: Dynamics of the success of NFE centres in X state—an investigation into the nature of fillips offered. The replaceability of such models can be made part of experimental studies. By themselves these experimental studies would be of immense value; firstly, because each experiment could fetch its researcher a degree and secondly, the most acceptable model could be propagated for greater involvement and adoption.

5. AREA : *Occupational Skills and the NFE*

The major component of NFE is to improve the occupational skills of such persons who would understandably be willing to improve them. Although orientation programmes

have become quite common for industrial workers these days but little has been done to impart skills to unskilled people as an act of social responsibility. Under NFE experiments could be undertaken in this direction. Research in this area would then be of an experimental nature. The basis of the research is the hypothesis that unskilled workers can learn skills in order to improve their standard of living. Unskilled and illiterate workers are amenable to a variety of exploitation. An unequal society that we are, possibilities exist of greater exploitation of people unless they are trained in various skills. Surveys of needed skills have been in existence for quite some time but obviously little action has been taken in this regard. Since formal schooling is the only system available for imparting skills, NFE will have to shoulder this responsibility. Correlative studies of imparting skills under NFE are a fruitful area for future research. Researches are possible in the area of impact of various programmes of imparting skills as well. It is therefore suggested that curricula for all these may be evolved and studies undertaken as pilot work.

Suggested titles would be:

- (a) Skills and NFE programmes—A study of correlates,
- or (b) A survey of unskilled workers needs and possible curricula,
- or (c) Impact of imparting skills in X area to a selected group of unskilled workers etc.

6. AREA : *Surveys of Administrative Models and Academic Designs*

It goes without saying that administration plays a very vital role in the running of any scheme. However, administrative models differ from state to state even as the designations of officers who hold charge differ in the extent of role, power and performance. We have already seen elsewhere that there is talk about an ideal system of administrative support. Under this discussion also three models are suggested but which one actually operates is not generally known. Therefore, status studies of administrative models are a proper area of research. Connected with this 'model' business is the related question of academic designs. NFE is as yet a new area, therefore there is plenty of scope for implementing new and still newer

academic designs. Which particular academic design would succeed and which would not is therefore a matter of opinion unless research support is made available. Experimental academic designs therefore need to be prepared and tried out. It is not possible to pin-point this area of research but the reader can have a look at the designs reported in another chapter where international experience has been abstracted.

Suggested titles are: A survey of administrative support in X state for NFE; Cost-benefit analysis of NFE programmes and a study of the status of administrative support; or, NFE—a study into its academic design in X state etc.

We may remember here that cost-benefit analysis has been the basis for the evolution of NFE programmes. Therefore, it is logical that numerous types of cost-benefit analyses are needed for proving the efficacy or inefficacy of NFE as such. It may appear today that the economics of NFE is a subsidiary area but the fact is that policy-making-wise it is the most significant area of all. It may not be forgotten that NFE constitutes the major chunk of future education. Life long education and need-based education have a close relationship with NFE. Several new dimensions would be added to NFE programmes with the passage of time. For example, what is being done at community college level (USA) would soon come to pass in India as well. With long years of retirement, better standards of living and greater material advancement are going to change the complexion of India's future education. Part of this change would be reflected in our reaction to absorbing new demands on education. Therefore, besides cost-benefit analysis future prospects of NFE can also be theoretically written about.

7. AREA : *NFE Programme—Review and Evaluative Studies*

Continuous periodic reviews of any programmes are an acknowledged method of diagnosing the problems that creep in from time to time. The principal function of this activity is to find out whether the objectives for which the programme was implemented are being achieved. The digressions are thus easily identified and correctives set in motion. Several

techniques of evaluation are already known and almost all books on educational research carry a chapter or two on these techniques. There are no special techniques for evaluating NFE programmes but the existing ones could easily be modified to prepare fresh tools for NFE alone. One or two tools developed in the NCERT have been dealt with separately. Needless to mention that review of a programme is different from its proper evaluation. Whereas the former is more general in nature the latter is by its very nature specific and item-oriented.

Suggested research could therefore be :

- (a) A review of NFE programme in X district or state.
- (b) A review of NFE programme for Orissa's coastal region—with specific reference to fishermen or . . .
- (c) An evaluative study of NFE programme for the fishermen of X district in Orissa state.

8. AREA : *Role Perception of NFE Workers*

Studies in role perceptions are fairly common in almost all academic and administrative fields. It is therefore in the fitness of things that such studies are undertaken in the area of non-formal education as well. We have a few studies on the role perception of teachers at various levels of formal education. Similar studies are possible to be conducted for NFE instructors, supervisors and administrators. In fact such studies are very necessary as well. Being a new area we have no idea as to what these instructors think of their role even as their wards have not recorded their views about them. Supervisors and others have to find a place for themselves in the academic area and somehow determine their status. It would be instructive if we could undertake such studies so that we know how these officials of NFE are being perceived. We may remember that a new breed of officers has been posted in rural areas like the Block Development Officer, Medical Personnel, Agriculture Development Officers etc., besides bank personnel and others. Comparative status studies of these persons vis-a-vis NFE personnel could also be made.

Suggested studies:

- (1) A study of role perception of NFE workers.
- (2) A study of the role of NFE supervisors.

9. AREA : *Methods and Media of Instruction*

Classroom lecture with the help of chalk and blackboard has been found the most effective and also the most prevalent method of teaching in the formal schooling system. Only very recently team teaching, CCTV, micro-teaching etc., have been introduced in a few selected schools. As yet the results of these introductions have not been researched properly. In the non-formal system we have to examine firstly whether the same methods as are common in the formal system would do or we have to have new methods of instruction introduced; secondly, if the expected results of the NFE are going to be the same as that of the formal system is there a point in introducing innovative practices in teaching. In the United States (USA) numerous studies have been conducted in the area of methods of instruction and the book by Wilbur Schramm: *Big Media Little Media* (1985) presents a vivid story of how media is being used in classroom instruction. Still the results in the language of Hakridge are: "The fact is that instructional researchers and designers have not provided even the foundations for constructing strong practical procedures for selecting media appropriate to given learning tasks". Irrespective of the foundations the fact remains that a lot of research evidence is available on the use of media and its effectiveness in classroom instruction.

The conclusion is that researches are essential both in the methodology of teaching or instruction and also in the area of the use of media can neither be avoided nor is it desirable. In India both AIR and TV broadcast classroom lessons of all types for all classes. This use of media is normally regarded as a part of Distance Education. NFE and Distance Education belong to the same category and are in fact first cousins, therefore at least this media question should be applicable to both.

Suggested studies:

1. A comparative study of Lecture-cum-group discussion

in the teaching of environmental science and history (under NFE).

2. A study of the use of media for NFE programmes—an experimental study with the cooperation of AIR and TV (as the case may be).

10. AREA : *Contents and Courses*

The NFE programme has been designed to be an alternative system of education to the one that has failed called the formal education. Unfortunately in India the NFE has not been allowed to become an alternative system, consequently the books prescribed in the formal system have either been abridged or condensed to suit the NFE. Even the original multi-point entry system has not been allowed to survive. Therefore what we actually have on hand is an NFE which is a kind of cross between the rigid formal and the flexible distance education. Apparently it has not been allowed to grow up into an independent entity. Still, the courses designed and contents developed have several innovative features. We must examine whether they suit the formal as well as the NFE; or, one and not the other. Most of the research in this area has to be experimental in nature. New content items have to be tried out and still newer courses studied.

Suggested studies:

- (a) A survey of courses in X subject Y state for NFE (according to level).
- (b) A study of the effectiveness of teaching X unit developed for NFE (level Y).



NFE AND THE ROLE OF STATE AND VOLUNTARY ORGANISATIONS

Ever since the new Prime Minister has taken over the role of the private sector is being given due recognition. In the area of education also the role of voluntary organisations is being acknowledged. In fact, there is a long record of the voluntary effort which has kept the torch of knowledge burning down the turbulent history of this country. Without this effort forthcoming I am skeptical whether we would have even reached thus far. The present chapter happens to be at once a plea for greater voluntary co-operation in the NFE area and also a pointer to the reasons why it is difficult for this co-operation to be forthcoming. Therefore, there is a great need for the State to act imaginatively. If what is happening already is any indication of future events and decisions, then I must say that we are doing very well.

While presenting his paper to a conference, Ved Prakash made mention of the percentage of voluntary and state efforts in the field of formal education. Except in a few states in India the voluntary effort averaged from 60 to 70 per cent of the total¹. This obviously means that like many democracies in the West, India also acknowledges the participatory role of voluntary organisations in education. Whether or not the state should have monopoly over education, whether formal or non-formal, has been strongly disputed. No socialist country would, however, entertain this discussion. If at all, this dialogue could have significance only in a democracy like ours.

In order to put the entire matter in perspective we have

1. Ghosh, S.C., (Ed.) *Educational Strategies in Developing Countries*, Sterling Publishers, New Delhi, 1976. p. 81.

the ancient Sparta, on the one hand, and modern United Kingdom, on the other, as two extreme examples of the case. In England, however, there has gone on a long and bitter discussion in this regard. The great protagonist of free enterprise was Godwin who in his *Enquiry Concerning Political Justice* (1793) was critical of the whole idea of national education. He summarises the arguments in favour of those used by Rousseau, adding the question, "If the education of our youth be entirely confined to the prudence of their parents, or the accidental benevolence of private individuals, will it not be a necessary consequence that women will be educated to virtue, others to vice, and others again entirely neglected?" Godwin's answer is worth quoting at length because his lone voice from the end of the 18th century speaks to us in the accents of the deschoolers of our own day:

"The injuries that result from a system of national education are, in the first place, that all public establishments include in them the idea of permanence. Public education has always expanded its pupils not the fortitude that shall bring every proposition to the test of examination, but the art of vindicating such tenets as may chance to be previously established. . . . Even in the petty institution of Sunday schools, the chief lessons that are taught are a superstitious veneration for the Church of England, and to bow to every man in a handsome coat. . . .²

"Secondly, the idea of national education is founded in an inattention to the nature of mind. Whatever each man does for himself is done well; whatever his neighbours or his country undertake to do for him is done ill. . . . He that learns because he desires to learn will listen to the instructions he receives and apprehend their meaning. He that teaches because he desires to teach will discharge his occupation with enthusiasm and energy. But the moment political institution undertakes to assign to every man his place, the functions of all will be discharged with supineness and indifference. . . ."

"Thirdly, the project of a national education ought

2. Quoted from Buckman, Peter, (Ed.) *Education Without Schools*. Rupa and Co., Calcutta, 1975.

uniformly to be discouraged on account of its obvious alliance with national government. . . . Government will not fail to employ it to strengthen its hand and perpetuate its institutions. . . . Their views as instigator of a system of education will not fail to be analogous to their views in their political capacity. . . ."

On the basis of a study conducted in 1968 in England, Dr. West in his book *State and Education*³ proved that the association of state with education has been disastrous and instead of benefiting education it has in fact resulted in harming it. It is quite possible that study in a socialist country may yield just the opposite findings.

As already indicated, this sort of debate has no relevance to our society. In a free democracy aiming at the setting up of a Welfare State one cannot hope to achieve anything single-handed. Participation from all quarters is what is needed most. The state participation is authoritarian, bureaucratic and slow. The voluntary participation is democratic, free and highly motivated. Even voluntary participation like that of state is not entirely philanthropic. Religious bodies have their own interest areas and would not be all that charitable as they look. They have, through temples, mosques and churches, given light over centuries to hundreds of millions of men and women. They continue to dominate voluntary effort to this day wherever permitted. In this country of course theirs has been yeoman's service—not caring to overlook or forget. The denominational institutions thus have in their own way modernized Indian society by accommodating new ideas and practices. It would be a mistake to stop them from coming forward for the service of Indian society.

Next only to denominational institutions come those who have money enough to institutionalize the memory of someone near to them. This private effort has sentimental value but on the national scale also its significance and role could hardly be denied. People want to be remembered by living in others' memories and thus their relative immortality is all that catches attention. What may be a passing whim for someone,

3. Routledge and Kegan Paul, London, 1966.

cumulatively it may amount to major attempt. In the nation-building effort all these attempts are welcome. In the category of private, voluntary effort we have a few that could be classed as neutral efforts—institutions opened in the name of Mahatma Gandhi, Jawahar Lal Nehru or S.C. Bose or even Saint Ravindar etc., qualify for this category. These people who form societies or groups to commemorate national leaders or heroes have their own vision which if anything is purely idealistic. These visionaries are out to build a society. They have an India of their dreams and they continue to translate their dreams into reality.

This classification was attempted to point out that the voluntary effort as such or participatory work as we call it subsumes all these categories described thus far. Their role has been significant largely in the provision of formal category. There is little doubt that they could be motivated to participate in the non-formal effort. All types and classes of human effort and material have to be geared to achieving, even if partially, the national objectives. The state may serve as the coordinating agency—supporting when needed. The state could also act as the Clearing House Agency to guide, inform and regulate voluntary participation. In other words, Godwin has something meaningful to say but in the case of this country, we would be hard put to it entertaining his logic.

But in case of non-formal education the situation is a little different. The clientele of non-formal education is very different from that of formal schools. Children belonging to families with good socio-economic conditions normally go to formal schools. Most of the parents in these cases can afford their children's education without much difficulty or any difficulty at all. They have to make a choice between government schools, schools aided by states, public schools, and those run by private organizations e.g., missions, societies, etc. In the case of left-outs and drop-outs there is absolutely no chance of choosing a school. The force is from outside to bring them to the non-formal education centres. Most of these children belong to the poor class, SC/ST women and labour class. This force goes waste if there is no inner motivation and this aspect

can be looked after by the voluntary organizations and local bodies with the help of the state.

The history of our country shows that there have been denominational agencies e.g., ashramas, temples, mathas, mosques, Jain centres of learning etc., which took active part in education. Their role has already been discussed in the earlier part of this chapter. They did not have any fixed curricula and teaching was governed by the needs of the society. Spiritual education was a common feature. The role of denominational agencies is a point of research.

In the non-formal education what we need is to evolve a pattern of education which takes care of the superstitions, social prejudices and castes. We may recall here that Manu—the ancient law-giver—had assigned different jobs to different caste groups i.e., to the Brahmins, Kshatriyas, Vaishyas and Shudras, and education was banned for Shudras. Later on it was modified according to which Shudras could get the education but no matter how learned a Shudra was he would not get the respect of a teacher. In response to the changed circumstances, the present formal education system and the non-formal education system and the informal education are in contrast to Manu's injunctions. All the children in 6-14 age-group have to be brought under the education system. For this J.P. Naik has reported four approaches to non-formal education (adult education), three of which have already been recommended by the Kothari Education Commission. The first is the mass approach. "This will involve, as the Education Commission said, a determined mobilization of all available educated men and women in the country to constitute a force to combat illiteracy and an effective organization and utilization of this force in a well-planned literacy campaign"⁴. The second is the selective approach which "means the organization of literacy work in selected areas (Where a good programme can be developed on the basis of the resources available) or for selected groups of people for whom it is advantageous to organize a programme (e.g., people employed

4. Naik, J.P., *Perspectives on Non-Formal Education*. Allied Publishers Private Ltd., 1977, p. 59.

on the construction of a dam). A third alternative is to work with institutions or groups which show commitment and to give financial support to the proposals made by them. Yet another approach would be to begin with areas or groups where there is an indication of a desire to learn and then to set up the needed machinery for the purpose we may also begin with specific organizations of workers or of employers and help them to evolve programmes to make all their members or employees literate, and so on"⁵. The third is the combined approach which is the combination of the first and the second. The fourth approach is the one we have been following since independence.

Whether we follow the first approach or the second or even the third one, we have to make use of manpower available in a particular area as well as the local resources. If the state does this work it would first do planning at its level and then contact local persons who have to be involved in it. Another choice may be opening a small office in that locality. But in that case also the office-bearer would be from amongst the local people only. On the other hand, if the voluntary organisations active in that area arrange the programme it might be easier for them to choose the workers who would work in the field. Secondly, they would get greater success in getting cooperation of local people which is a must for the success of such programmes. Thirdly, the success of the programme is likely to contribute towards the popularity of these voluntary organizations.

In a democratic country like India, whether non-formal education should be within the perview of state or it should be entirely left to voluntary organizations cannot be a point of discussion. The geographical climate and the local needs have made one state different from the other. There is a logic behind keeping education on the concurrent list. But in case of non-formal education, the situation is different. The centre cannot run different types of non-formal education programmes in

5. Naik, J.P., op. cit., pp. 59-60.

different states. Therefore, the responsibility of carrying out such programmes should be given to the voluntary organizations which they will do with the help of the states.

Both in terms theory and practice the role of the state and voluntary organisations stands defined. An attempt has been made to show that in a democratic country voluntary organisations have a much greater role to play than the state, particularly in the field of education. Voluntary participation is all the more welcome for being self-motivated, imaginative and easily adaptable to local needs. Even the most well-administered state cannot reach everyone and operate as effectively as a voluntary group. The state can coordinate these efforts, direct when necessary and find them well but to centralise what ought to be decentralised is to go against the spirit of dedicated work which only people can render voluntarily.

INTERNATIONAL EXPERIENCES

(A Review of Literature)

Not only in India but in other countries also lot of work has been done in the field of non-formal education. We present here brief summaries of that work.

1. One Literacy Campaign has successfully been carried out in Tanzania. In 1971 there were more than five million illiterates in Tanzania. Tanzania made a momentous political decision to eradicate illiteracy by 1975. Adult education centres were set up all over the country. A teacher training programme was started with a view to provide literacy teachers to these centres. The Directorate of Adult Education was formed in the Ministry of National Education. In 1971 the amount allocated for this programme was 9 million Tanzanian shillings which went up to 20 million in 1973. All mass media and national institutions were used to make this programme a success. Special radio programmes were organised, one of the newspapers devoted one page a day to an article which could easily be read by new literates. In the words of Daniel Mbunda "Literacy themes were printed on popular textiles, local dancing groups and jazz bands popularized the movement through their music, shows at local functions were designed to popularize the literacy campaign. Political and government meetings would not be complete without a literacy component. The activities of individuals and organizations, both public and private, were mobilized in the war against illiteracy. In other words, a national will to eradicate illiteracy was created"¹.

1. Mbunda, Daniel, *Non-Formal Education—The Key to Tanzania's Successful Literacy Campaign*. New Frontiers in Education, Vol. VII, No. 1, Jan.-March, 1977, p. 95.

Today non-formal education has become part and parcel of the life of people in Tanzania. The result is that the people's outlook towards life has undergone a transformation, their skills have improved and their life has become better. More than four million literacy-class learners appeared in their examination on August 12, 1975.

It was a Tanzanian non-formal education revolution and was a great success. The reason was that a national will was present throughout the revolution. Daniel Mbunda is sure of one thing: "Self-confidence born of self-reliance can result in miracles. Tanzania has dared to mobilize more than four million people into literacy classes. Tanzania has dared to resettle more than ten million people in planned villages".

2. **Saemaul Education Project of the Republic of Korea** aims at improving the quality of living of the village people. Saemaul leaders are trained as catalysts for Saemaul Undong (New Community) to create the nation-wide spirit of cooperation, self-help and diligence.

But the conditions in which this programme operated in Korea were different from the prevailing ones in our country. It was the dictatorial set up and the President was governing the whole movement. Officers, university professors etc., were sent to villages and they worked together. Physical training and uniform were used for promoting the feeling of togetherness and unity.

3. The community development through non-formal education was started in the Philippines in the year 1972. The objective of this programme was to promote community development through the introduction of the green revolution, cleanliness and beautification campaigns and cottage industries. This was done by changing the attitude of the villagers from dependency to self-reliance and linking schools and homes in a co-ordinated programme. A survey of socio-economic needs of the community was conducted and on the basis of its findings local resources were used "in promotion of work-oriented education at primary and secondary levels, integration of the Green Revolution Movement in the school with the home and

the creation of a co-operative market in the community"². Three other non-formal education programmes have also been organized in the Philippines. One of them was for farmers and out-of-school youth which was linked to productivity of farmers through instruction and training in three ways viz., classroom instruction, laboratory and demonstration and field practice and visit to farms of the trainees. A survey of farming conditions was made. A model farm was chosen and used as laboratory and demonstration farm. Trainees after getting training procured loans from rural banks for starting their own ventures. Another programme of non-formal agricultural education was in a farming community. A mobile team of the principal, two agricultural teachers, one home-making teacher and a nurse was made which visited different farm families. This team also helped them to get started, establish income-generating activities and a cooperative marketing system. It also encouraged them to participate in civic action projects. The third programme in this list is of non-formal short-term opportunity courses in home industries. There are 20 home-industry centres found at different places which provide training not only to out-of-school youth but also producers, entrepreneurs, managers of cottage industries, demonstrators and technologists.

4. Besides this another project titled Cotabato Rural Uplift Movement (CORUM) also provides non-credit training to adults and out-of-school youth through practical courses in vocational agricultural training, health and sanitation, literacy civic duties, political and cultural rights and also assists the Barrio people to improve themselves.

5. & 6. Two projects of non-formal education viz., Adult Education Programme for Factory workers and non-formal Life Skills Training Programme were taken up in Thailand. The first one provided education to factory workers of the Thai Kurabo Weaving Factory. Students of the Petchburi Teachers' College taught the workers. The curriculum was

2. 'Experience in Educational Innovation—Asia', UNESCO Regional Office for Education in Asia and Oceania, Bangkok, 1978.

prepared by Ministry of Education. In the latter the Mobile Trade Training School (MTTS), started in 1960, provided skill training in metal work, auto-mechanics, electricity, radio, TV, woodwork, cooking, dress making and tailoring etc., to rural out-of-school youth and adults. Over time, 45 provinces had been covered under this project.

7. Under the project titled Education for Rural Transformation of Nepal, many programmes have been covered out of which the functional population, literacy and skill development programme for unschooled children, health education and services are those of non-formal education.

8. The rural education system in Upper Volta had the following principal aims:

1. to provide opportunities to all rural youth to receive at least a minimum of literacy and numeracy by attending a full-time school during adolescence;
2. to inject an element of modernization into the villages by training all young people in the basic principles and methods of modern agriculture;
3. to lower the total cost of education for the masses by combining education with practical farm work and by shortening the total period of education during the first decade of expansion of the education system;
4. to reduce wastage in education by concentrating the teaching on a more receptive and better motivated age-group than that normally taken into the primary schools.

It is a comprehensive work.

The non-formal education project (1975-79) for Guatemala has the following objectives:³

1. To increase coverage in educational opportunities, making it available to a significant sector of the population which, at present, cannot be covered by the formal school system.

3. Bonanni, Camillo, 'Technical Papers on Non-Formal Education. Unit for Co-operation with UNICEF, UNESCO, Paris, October, 1977, p. 3.

2. To use available resources to the maximum, establishing a network of educational services oriented to the objectives of the Development Plan.
 3. To offer educational opportunities to the population in aspects related to productive and social functions, enabling their participation in the development process through an effective use of modern delivery systems and corresponding educational technology.
 4. To make available to the population gradual and continuous non-formal education programme, thus becoming involved in a permanent educational process.
9. This would cover preferably the population which never had the advantage of formal education with priority to children between 10-14 age-group and men and women between 15 and 45. Different governmental agencies are doing non-formal education programmes in the country. A responsible operational structure is needed for the coordination of these programmes. National Non-formal Education Board was established for this purpose. This NFE system will have educational programmes at different levels known as modules. It means these educational programmes have a functional structure and although they have their own characteristics and existence they balance and complement themselves within the system. Four different curricula could be identified for out-of-school children, youth, mothers and farmers. The global cost would be Q 11,000,000.
10. The educational provisions in Sudan are concentrated in the urban areas of the three capitals and of Port Sudan. Therefore a national scheme has been developed for this country. Since there is a close link between the training and learning needs of the local population and socio-economic developmental trends of the zone of intervention, the developmental projects like Agriculture Rehabilitation Project for the Southern regions, Equatoria, Bar-el-Ghazal and Upper Nile, Rehad Irrigation Project (Blue Nile), Kashm-el Gizba Agricultural Project, Water Supply Project for the Southern regions and Mining Development Project (Central-Eastern region) could benefit from non-formal education by operating within

the framework of a developmental project which offers jobs requiring only eight hours of work per day, a non-formal education programme may be sure to obtain the participation of a large number of learners⁴. In the planning phase persons at the national, provincial and local level were involved. In the implementation phase representations of various ministries involved in the programme (at provincial level) and local leaders, Samads, government agents like teachers, agricultural extensionists etc., and social workers and participating population of the project (at local level) were involved.

11. The people living in Southern Sudan are the Nilotes, the Nilo Hamities and the Sudanese. About ten major languages are spoken here but Arabic or Pidgin Arabic is the most common among them. The Water Supply Project developed for this part has the following objectives:

1. To bring the source of drinking water near the village so that the workload of the women can be reduced and some of the time actually used for it dedicated to the physical and cognitive development of their children.
2. To establish a safe hygienic environment.
3. Better health and nutritional conditions⁵.

The contents of the curricula will include cores like water-environment, water health, water hygiene, water nutrition, water mechanics, water knowledge as well as water agriculture, water livestock and water fishing if and when needed. The contents would be classified under four areas:

1. First area would include contents related with children's educational needs.
2. The second area will have contents related to the adolescents' educational expectations.
3. It includes those inherent to mother's problems.
4. It comprises contents meant for working population of both the sexes.

4. Bonanni, Camillo, op. cit., p. 31.

5. Bonanni, Camillo, op. cit., pp. 34-40.

Graphic and audio-visual material were to be used. These materials were composed of non-sequential and non-graded learning units. The preliminary data for elaboration of non-formal education programme were provided by the technical local studies on water supply, public health and epidemiology done by Bloss (1967), Fergusson (1972) and Giacometti (1974) and the detailed study on educational conditions of the Southern region done by the Ministry of Education (1973). Regular teachers, the health assistants, the agricultural extensionists and the livestock agents, other government employees in the zone and local leaders acted as mediators. If this model of linking non-formal education programme with Sudan UNICEF Water Supply Scheme is successful, it can be followed by other countries also.

12. Ninety-three thousand hectares of the land between Diyala and the Tigris River, from Khalis town to North Baghdad in Iraq covers Baghdad and Diyala districts. The total population is 70,000 out of which 50,000 are farmers. Therefore the Lower Khalis Project⁶ in Iraq has been linked with agriculture. The main problems of the population of the zone can be classified under four categories—Health and Nutrition, Education, Economics and Labour. A resettlement of the actual rural population in blocks of ten families each is envisaged and each block has to have approximately 100 inhabitants. New crops like maize, linseed, beans, citrus, fodder, vegetables etc., provide sufficient family labour for the year.

As in the case of projects for Sudan, Guatemala etc., referred to earlier, a number of projects taken up in other countries relate to rural development. A few of these are described below.

13. In Sri Lanka several ministries and other agencies are conducting non-formal education programmes which have a direct bearing on rural and community development. The Ministry of Education also conducts the Adult Education Centre Programme in collaboration with other ministries,

6. Bonanni, Camillo, *op. cit.*, pp. 42-47.

departments and voluntary agencies. These programmes have truly an integrated character and focus on personal, community and rural development.

14. In Bangladesh, the Self-Help Project or Shawnirvar Project was first introduced by A.H. University College of Bogra in 1973. Now it has become a national project. In two years' time it spread to over 8,000 villages. The activities are directed mainly towards agricultural extension and increased food production. They also promote fish culture and breeding of fishes in ponds. Family planning programme is also one of its concerns.

15. The Comilla (Bangladesh) Project was started in 1959 as an experimental project. Comilla is a thana. A lot of effort was put in for its development but the results were not satisfactory. The Academy for Rural Development started its work with a general set of ideas and principles from social science theory and research and also from an analysis of actual conditions of this thana. Cooperatives, Thana Training and Development Centre (TTDC), Rural Public Works, the Women's Programme and other Special Group activities were the main components of this programme. The aim of non-formal education activities in this project was to prepare the rural men, women and youths for a new and better style of life in their communities and families too. It emphasised the cooperative action in solving the basic problems of agricultural production, employment, health, nutrition and family planning. It is also integrated into other components of development process such as rural economic and political organizations, diffusion and management of technological innovations, research and evaluation and in-service/pre-service orientation and training of government administrators, managers and field workers. Short courses for cooperative inspectors, project supervisors and Thana level officers of the Agriculture, Irrigation, Family Planning, Health and other departments of government are being conducted. Training of cooperative managers, model farmers and other 'front line' participants in the development process is also provided.

16. Ethiopia has an estimated population of twenty-seven

million. Over 60 languages and 200 dialects are spoken here. It is predominantly a rural country and about 90 per cent of its population lives by agriculture. In 1974 nationalization of rural land took place which made it (rural land) the collective property of Ethiopian people. Chilalo Agricultural Development Unit (CADU) was established in 1967 with the help of Swedish International Development Authority (SIDA) which operated in an area of 10,000 square kilometres (inhabited by about 350,000 people). The work was done in two phases, 1967-70 and 1970-75. The input was in the form of cash, credit and a grain marketing service. CADU emphasized development of model farmers' area committees and cooperative societies. Building of 145 km. of all-weather feeder roads in Chilalo on a labour intensive basis was its important contribution. In ARSSI Rural Development Unit (ARDU) the emphasis is on social development. It involved all members of the peasant's household in development activities and expanded employment opportunities in agriculture and small and medium scale industry. It also concentrated on the alleviation of the problems of people of the least privileged class. For preparing rural development agents, local cooperative managers and selected peasant representatives (leaders of PAS, women and youth groups, coops etc.) specialized educational programmes (at the regional level) had been planned. The projected cost for ARDU for the period 1975-80 was about 31.1 million Ethiopian dollars. The cost of CADU experimental programme for 1967-75 is approximately 44 million Ethiopian dollars.

17. About 275,000 persons live in Plan Puebla. In 1967, before the project was started, the average land holding per farm operator was 2.7 hectares. It was conceived as an integrated plan of attack on many problems limiting farmer use of adequate technology. The level of technology used by the farm operators was low, therefore, it was thought to devise a programme to substantially increase the yields of corn with appropriate agronomic and other technology. The operational elements of the project were the agronomic research programme, the communication programme, the evaluation programme and the coordination programme for the first seven years (1967-73).

Plan Puebla received a grant from Rockefeller Foundation which was administered by the International Maize and Wheat Improvement Centre (CIMMYT). After 1973 it did not receive any grant from any external agency.

The results of the project are very encouraging. It showed that those campesinos who used recommended practices other than conventional technology used 30% more man days per hectare of work. Secondly, there was a 23.8% increase in average family income. Thirdly, the family diet was improved. Educational and promotional films were used for accelerating the extension campaign. A theatre group also presented a play suggesting the removal of the middleman. Other non-formal devices were also used.

The second type of projects through which non-formal education has been given are related to nutrition-health delivery and family planning. As we all know these are some major dimensions of life which influence a country's development.

18. The first project in this list is the Condeleria Project (1968-73). It was a pilot or laboratory project in comprehensive health delivery and operated in an area near Cali, Colombia. The University of Valle was associated with this project. At that time according to one law (which was still under review and could never be passed) 18-20 year old women had to do compulsory social service for one year. They were utilized as health promoters. It was decided to focus on problems of malnutrition and also to design medical service programmes. One Health Centre was already there. Three units viz. the Basic Unit, the Service Unit and the Programme Planning and Supervision Unit were also added. Their achievements were recorded in the following areas—complete elimination of neonatal tetanus, decrease of diarrhoeal disease, decrease in overall birth rate resulting from an increase in the adoption of family planning methods and decrease in infant mortality. The cost of the programme was \$ 40 per person per year (at the 1972 exchange rate).

19. The Mothers' Clubs established by Planned Parenthood Federation of Korea (PPFK) are based on the traditional

informal associations. The objectives were as follows: (1) to create a local and voluntary movement of mothers in order to encourage family planning practice, (2) to aid field workers of family planning in finding new adopters, (3) to serve as a channel for information about family planning and supply of contraceptives, (4) to promote participation in community development activities, and (5) to accelerate interpersonal communication about family planning and also increase its legitimization.

With the development of clubs programmes for nutrition, credit unions, community activities and promotion of female equality were also organized. The age range of members was 20-45 years. The training of club leaders was provided by PPFK. Now more than 50 per cent of Korean villages have mothers' clubs. About 1,400 family planning field workers held discussions within the groups. Educational material focused on factual information, motivation, creation of favourable attitudes toward and social acceptance of family planning were developed and assistance to families was committed. These non-formal educational methods also included mass-media programmes.

20. In Malaysia the Applied Nutrition Project (ANP) was launched in 1977 which "aimed at improving economy and food production involving agricultural extension activities, providing educational activities including nutrition education, home economics, community education and school health activities and pre-school education, health and sanitation activity including maternal and child health care, immunization, family planning and environmental sanitation as well as nutrition surveillance, treatment and rehabilitation and supplementary feeding at clinics, pre-school child care centres and schools."⁷

21. The project Feeding of Vulnerable Groups viz. infants and pre-school children, pregnant and lactating women was

7. Report on the Special Task Force on Topics for Group Discussions, Sixth Regional Consultation Meeting on the APEID, Bangalore, India, 20-30 April, 1979, p. 7.

INTERNATIONAL EXPERIENCES

started in Thailand. It consist of setting up of the Child Nutrition Centre (CNC) in the villages attached to health of midwifery centres or schools. The role of CNC is to take care of children while mothers have to work at home or in the field providing health care of children on immunization programmes or other health services, preparing head-start on learning skills, social and individual health practices, improving nutritional impact of the child by providing necessary food supplements and providing indirectly for the education of mothers by participation in the activity of the centres. Breast-feeding of infants, production of nutritious food within the community, health care of infant and pre-school children, production of infant food and high protein supplements etc., are emphasised in mother's education.

22. In the Philippines, the Bauan Nutrition Programme in the Southern Luzon province of Batangas has three major phases: (1) Preventive programme for all infants from 5 to 23 months, (2) Rehabilitation programme for second and their degree malnourished children aged 24-60 months, and (3) Malward Programme for severely malnourished pre-school children needing hospitalization as well as distribution of emergency food supplement.

23. The Equador non-formal education project is known for its creative use of games and other discussions, devices to arouse confidence in villagers and motivate them to participate in development activities. This project can be perceived as a series of sub-projects with similar objectives, staffing and processes. These projects with different time targets included educational games designed to increase the participation of compesinos an to improve literacy and numeracy skills, photo-comic books and the cassette tape-recorder project. The non-formal educational materials were designed to increase the participation of compesinos in community functions and decision-making. A number of games such as letter and number dice, word rummy, math bingo etc., were developed to increase literacy and numeracy skills. With a view to combat compesino apathy and reluctance in expressing themselves, an adaptation of the Ashton-Warner dialogue technique

and 'Hacienda' game were designed. The motivation lies in helping Equadorian peasants to liberate themselves. This idea was derived from Paulo Freire's book *The Pedagogy of the Oppressed*.

24. The project in rural Botswana is known by the name "The Serowe Brigades". Brigades are a combination of work place and training. The production they undertake is geared both to training in a skill and to generating income to pay for the training. In the beginning students of formal schools took part in building the school, making its furniture etc. But after some time they started resisting it. It was realized that the main function of schools was role selection. They were costly and one of its purposes was exclusion of majority. People started thinking that ills of schooling were the reflection of ills of society. Therefore an alternative to formal schooling with its own models, systems, approaches and organizations came into existence in the form of Brigades—a combination of education and production. In Serowe the Brigades provide training at different levels in twenty different skills. The production programme along with the skill training also aims at maximum recovery of cost of training and education. The training takes place on the factory floor, on the building site, on the farm and in the printshop. This system showed that training of a good standard can be achieved. It also showed that school is not the best place for training rather it also takes place in environment, the human and physical environment, in a directed way but all the time unconsciously. Besides skills, non-vocational subjects like mathematics, science, development studies, english and cultural studies are also taught in Brigades. Elements of science and mathematics are applied and used within the production process of the Brigades.

25. Sri Lanka has a non-formal education programme under which full-time and part-time technical courses are run for school-leavers and adults. These courses on arts and crafts, metal work, wood work and agriculture intend to give an opportunity of learning skills which would lead to employment or self-employment.

26. Vocational Training Centre (VTC) of Jombang Youth Social Development Project aims at training youth belonging to 14-18 age-group in manual skills. It is useful for village development and also gives them educational opportunities in order to help them in getting a job.

27. The clientele of the Chimaltenango Development Project, started in 1962 in Guatemala is the Cakchiquel Indians. They are poor and unhealthy. The aspects concentrated upon are social and economic justice, land tenure, agricultural production and marketing, population control, malnutrition, health training and curative medicine. Dr. Carroll Behrhorst opened a clinic in a rented building. He spent three months in finding out the problems of people and visiting them. He came to the conclusion that almost every child was malnourished and diarrhoea was common to children and adults. Tuberculosis was another common disease. Later on health promoters and extension workers were appointed. Financial assistance in the form of loan was also given.

28. The Rural Public Works Programme (1962-67) of Bangladesh aimed at mobilizing initiative, energy and capacity for learning of rural people. Union and thana councils spent 88 million of S 150 of US/Pakistan Government Public Law 480-generated funds in the construction or repair of 98,000 miles of earth roads, building of 11,000 miles of drainage-cum-irrigation canals, construction of 3,000 community buildings and 208 million man-days of seasonal employment. Each project was given to a project committee which numbered 33,704 in 1964-65 with 187,266 local leaders serving on them. The Academy for Rural Development developed a demonstration model for the execution of work. Villagers and their elected officials were involved and the decentralized decision-making was encouraged.

All the projects mentioned above have one thing in common i.e., they are related to the basic needs of the society or community. This is one plus-point with non-formal education. While formal education provides all-round education, it does not have any immediate effect on society. But non-formal education being linked with the needs of life in a particular

country or area shows immediate effects.

29. Universalization of education is one of the objectives of non-formal education. In Singapore, it has taken the form of the Junior Trainee Scheme. In Thailand two projects titled Area Vocational Centres and the Community Secondary School are examples of this work. In India a number of universities and teacher training institutions have the system of correspondence courses. In the Republic of Korea evening classes in the middle and high schools in the formal school system are organized. Distance learning techniques, mass media and correspondence schemes are being utilized in countries like Malaysia, Sri Lanka, India, Republic of Korea, Afghanistan, Pakistan, Philippines and Thailand.

The Open Air University of the Philippines also comes under the category of non-formal education.

Nicaragua—1974-75

The Radio Mathematics Project

30. The use of radio to teach mathematics in the pre-primary classrooms Nicaragua supported by US AID through a contract with Stanford University, USA was started in 1973 in collaboration with the Government of Nicaragua. Regarded as a major project of its type, it was carried on in two stages. It had a proper research design and reported in a systematic manner. The closest parallel to this effort was the TV programme of sesame street but systematic instruction in various school subjects through Radio has a long and distinguished history in the USA, Swaziland, Thailand and Sudan. The Institute for Mathematical Studies in the Social Sciences (IMSSS) developed such programmes since its inception in 1959. The earlier programmes in USA were exploratory in nature and were meant for teaching geometry and logic to older elementary school students. Later *Sets* and *Numbers* project was initiated and resulted in a series of publication. The institute introduced several other programmes later. The present project therefore had the benefit of such an experience and was transplanted in a developing country.

During the radio lesson, children were asked to respond orally, physically, and in writing. Oral responses included singing and answering arithmetical and other questions asked by radio characters. Physical responses included moves in simple games, work with concrete materials, and finger counting in arithmetic exercises. Written responses were almost all on the worksheet. They included drawing as well as writing the answer to printed and oral exercises. The response rate was high—approximately 40 to 60 responses during a radio lesson—to engage the interest of the children and to facilitate their learning.

The project provided direction to teachers by means of a guide that accompanied each lesson. The teacher played a limited role during the broadcast portion of the lesson, mostly helping slower children with written work. After the broadcast she presented the remainder of the project lesson. Teacher-training sessions, before and during the school year, helped orient teachers to their new instructional role.

The results were encouraging. The success of teachers was limited to their understanding of the subject and skills involved and the response of students became better with each unit of instruction.

Chinese Experience

31. Not unlike India, China also had a huge illiterate population when it shook off its colonial yoke. The three unique advantages China had in 1949 were: (a) The mass involvement of people in the change of government, (b) The presence of a single script, and (c) The long history of a homogeneous culture and tradition. Because of the typical nature of its government change was easy to bring about. The new Chinese government quickly initiated a programme of national literacy and worker education. In 1958 it introduced a national spare-time, half-work, half study programme for both rural and urban sectors. The success of these programmes has been debated but there appears to be general concurrence on one point—the results of the newly initiated programmes are impressive. It is also true that in its implementation the Chinese

authorities have disagreed with the nature and content of non-formal education but they realize uniformly that Chinese education must 'walk on two legs' i.e., the leg of formal, hierarchical and selective education and the leg of non-formal, flexible and open education. The content and approach of non-formal education in rural and urban areas have been different but it is generally agreed that with the growth of industrialisation these distinctions would cease to exist.

The non-formal education of workers has been most innovative in China. The form of education now being offered has a history of successes and failures but with little national organisation and planning tremendous changes have occurred. The National Administrative Committee on Staff and Workers Education is overall incharge of workers' education as such. In the urban, spare time primary and secondary schools, the red and expert colleges and the secondary technical schools the concept of writing theory with practice, mental with manual labour, and red with expert find their highest expression. The major difference between the formal and non-formal technical education is that in the latter more emphasis is laid on practice and applied knowledge and lesson theory and that is precisely how they are evaluated. Around 30 to 40 per cent labour force is already enrolled. Chinese are using TV and correspondence education as well as organise night classes for workers. We must remember here that politicization is the major Chinese goal of universal literacy and since there is a single political party in China they are directly involved in the teaching of political ideology and practice in the classroom. The overall goal of Chinese government is modernization of the country and therefore education is made to serve this objective. Worker's vocational education has programmes like industrial mathematics, mechanical drawing, hydraulics, electrical engineering, machine design etc., and English is taught here as a second language.

For the rural sector China has three types of NFE programmes, (1) non-formal agricultural universities and colleges, (2) short-term training classes and activities, and (3) non-school information dissemination activities. The first form of

NFE has been designed to supply skilled human resources for China's slow but persistent increase of rural mechanization. Courses of study are flexible, enrolments vary, and there are few restrictions on entrance requirements. There are strong links between these colleges, the secondary technical schools, and the regular provincial colleges.

The second model of NFE in China is that of short-term training classes and education extension services. This programme has a combination of offering a basic level of literacy and an effective extension and demonstration programme.

Another form for improving agro-industrial skills is the technical exchange station organised by urban trade unions to publish a variety of technical manuals, sponsor forums, and exhibition of new and innovative techniques and technologies. Finally the classes at the commune production brigade and production team levels focus on specific agricultural techniques, such as seed selection, water conservation, fertilizer production etc.

The non-school information dissemination activities have been less emphasized, but are an important method of technique transformation. The model farmers are asked to demonstrate their techniques.

The additional non-formal mechanisms are the use of TV and radio and the publication of books and magazines popularised for rural population.

NFE: A SUMMATION

(A)

While summarising whether or not non-formal is innovation the exact quantum of innovation in this arrangement must also be detailed. We are aware that non-formal education is a flexible arrangement which caters to the individual requirements—an arrangement that has grown out of the dissatisfaction from the stultifying climate of a formal school. Reasons why we could regard non-formal as an innovation are:

1. In terms of teaching-learning arrangement non-formal is quite different from the paradigm “pupil-curriculum-teacher-evaluation” offers. For a person used to a formal school set-up the whole thing could be absolutely bewildering.

2. There are either no variations in the formal school set-up or if at all there are, their number is very limited. Also, these variations could occur either in grading system (i.e. children may move in different subject areas according to their pace of learning from one class to another, that is one can have a non-graded school) or in the classroom teaching where a few aids may be used or the teaching may be partly interspersed with Socratic method. However, in the non-formal arrangement these variations have no great significance. Neither in the entry nor during the learning hour and certainly not at the termination point could two non-formal arrangements agree.

Children or adults of any age may enter the non-formal set-up. They may learn reading or writing but they may also not. In most cases non-formal education and the life-long education have identical functions, and therefore, the question of certification does not arise. Neither can in school training these two arrangements resemble.

The variety of the non-formal set-up is what makes it so distinct and so inviting.

3. But where the non-formal arrangements part company is the value each attaches to learning. In a formal set-up the quantum and quality of learning is fixed by society with the certification furnishing the eventual value-judgement. Under the circumstances the quality and quantity of teaching has, therefore, to be predetermined and regularly supervised. Deviations from a fixed norm are not welcome.

In the case of non-formal education the quality and quantum of learning is determined by the child or adult as the case may be. Here teaching could be provided or offered if the learner demanded it. Teaching is not a pre-requisite of the non-formal set-up. In other words, here learning is self-paced and individually determined. This by itself is a radical departure from the formal school set-up.

4. India is as yet not an industrialized nation but it proposes to become one. Until it does attain that target it cannot hope to have a social stability of either the rural economy type or that of an industrialized nation which has realised its potential. The dilemma, therefore, of *is* and *shall be* cannot be easily resolved. Consequently both the formal and the non-formal arrangements would tend to reflect these states of affairs. More particularly the non-formal education has to provide materials that beside serving the immediate needs of the society also have a futuristic vision. Whereas the formal is suitable for a stable society whose main interest lies in perpetuation, the non-formal has the potential to suit both the *is* and the *becoming*. The poor capacity to respond quickly to any need that arises whether in terms of time i.e., the distant or the immediate, or in terms of locality whether urban or rural/pastoral or even in terms of requirement say, of the individual or societal, could easily be witnessed in the non-formal. The diversity coupled with agility to reach to any contingency is the real strength of the non-formal. The formal system also attempts to respond to challenges but this response is so slow and belated that half of the urgency and

pertinence are lost in the process to react. No such constraints act as fetters to movement in the case of the non-formal.

5. Even in the advanced nations the non-formal arrangement has been favoured because of its variety and diversity. Its uniqueness is more noticeable at one point than at others. By its very nature the non-formal subsumes within itself the adult education programme and is therefore a life-long system. In the post-industrial societies several paradoxes have resulted from the provision of life-long education. The three examples cited by Shimbori may be useful for consideration, namely, too many opportunities for learning at the cost of their scarcity value, the problem of the cultured masses against the uncultured elite, and abundance of short-lived knowledge vis-a-vis that which can answer man's deepest needs, require serious consideration.¹ These paradoxes are not likely to recur in our society for the simple reason that we are neither a literate nation nor an industrialized one. Because of the inherent wisdom of Indian people we shall hopefully avoid these pitfalls. This of course does not prevent us from adding a new dimension to the non-formal programme viz. of regarding this as a life-long education.

In several respects care has been taken to regard the non-formal as life-long education. This needs to be emphasised and clearly restated. Unless we made simultaneous efforts to see that the non-formal does not remain merely an alternative to the formal and bridges constructed to link them both, it is not possible to enrich either the programme or enhance the learning components of a highly diversified system. The dangers in restricting the areas of operation are clear and too many. What made the formal system merit universal approbation would perhaps be the fate of the non-formal as well, therefore all precautions are necessary to see that the non-formal does not neglect to serve as life-long education also.²

1. Dave, R.H. (Ed.) 'Reflections on Life-long Education and the School', UNESCO Institute for Education, Hamburg, 1975.

2. 'Learning Opportunities for Adults', Vol. I, p. 76, General Report. OECD, Paris, 1977.

The OECD report recommends that a variety of innovating programmes is required if the socio-economic composition of participants in adult education is to be substantially altered. On the basis of current developments they could be classified as follows:

- (a) work-oriented
- (b) community-based
- (c) individualised learning opportunities
- (d) technology-centred
- (e) attitude reinforcement
- (f) civic literacy and cultural.

6. Non-formal education has been visualised as education for development. All types and forms of education lead to one or the other type of development. In this case, however, specific goals have been fixed to see that education does lead to social and personal development. Social development in this case includes economic development as well. The most important segment of the non-formal programme is for rural development. Rural development as envisaged under the non-formal programme is of the most comprehensive genre covering the entire gamut of social and economic life. Villages in the undeveloped countries are faced with various problems. Superstitions, ill-health, bad housing and very restricted avenues for economic development plague these rural areas. They are cut off from the urban centres and the children acquiring education in these villages either get alienated and are therefore lost to the community or they just move out for good. Consequently, any non-formal programme to succeed under such conditions will have to be geared to improving health and hygiene of the people and creating conditions so that people could at least get part-time employment to start with. The vast potential lying latent in the women folk shall have to be properly tapped. This is a new type of programme which surely could never have been envisaged under the traditional formal schooling. It should be quite obvious that in this case either 'literacy' and 'numeracy' have to be underplayed or they would be avoided like the regular schools once were. By itself it is a novel experiment being tried in certain areas.

Besides India there is a strong feeling that formal education with an urban-biased curricula has failed to deliver the goods. That kind of education does not invite and motivate the youth to participate in the development processes. The non-formal education has, therefore, to be more dynamic than supporting by accelerating the developments so that the gaps between urban and rural, rich and poor and men and women are bridged. This action-oriented non-formal programme could be seen only against the requirements of developing countries. The developed countries are facing a different set of problems e.g., social problems of a changing society. The crisis in values is the consequence of high industrialization. Learning from experience, a proper programme for a rural society in an underdeveloped country like India, must avoid this sort of pitfall. Be that as it may, the non-formal approach has to be taken up as a challenge toward making up losses handed down to the people by history.

7. The entire question of seeking alternatives in education emanated from a UNESCO report presented by M. Edgar Faure and others. The report made two significant points: (a) Education cannot be separated from the process of life-long learning because historically speaking early man must have kept learning options open to him throughout life, (b) Education should be dispersed and acquired through a multiplicity of means. The important thing is not the path an individual has followed, but what he has learned or acquired.³

The question how a man learns has been underplayed as against what he has learned. If the same logic were pursued a little further it would amount to saying that the channels and means of the acquisition of learning are and have to be different. The range of these means even in the life of an illiterate tribal child in a remote area range from mother, peer-group, adults and the ecology of the place. For an urban illiterate living in slums the exposure to the din and bustle of life besides posters (visual and written), the occasional snatches

3. Faure, M. Edgar, et al. *Learning To Be*. UNESCO, Harapp, 1972, p. 185.

of a radio broadcast or a glimpse of television, as also the blare of political demagoguery, play an important role in teaching him about life. These means of learning are neither controlled nor classified. But they do have their role—role which cannot be underplayed. Added to all these are other means which are funded, regulated and designed to enrich the lives of the children left out by the circumstances and conditions hostile to them. To think of ways and means of educating them, enriching them by meaningful experiences is a task which only innovation could undertake. In this case non-formal is the answer to the challenge. Not that these means were totally absent before but their importance has been acknowledged only very recently.

We have already noted that the non-formal approach allows each person to choose his path more freely, in a more flexible framework, without being compelled to give up using educational services for life if he leaves the system. We have also seen that this approach varies the content of teaching according to societal requirements and the method and the pace of learning is individualised. With each individual child or adult growing up to realise where his wants can be more suitably met may like to choose something radically different from what was being offered to him hitherto. To quote Learning To Be⁴ again:

"The closed systems tend to be selective and competitive, depending primarily on standards set within the system to determine those who will and those who will not be allowed to study, and at what ages.

The open systems tend to be non-selective, non-competitive and non-prescriptive. Choice of lectures and subjects listened to, read, or otherwise studied depends mainly on the participants' own interest".

The report has significantly noted that in between these two extremes there exist educational activities and institutions. In each society these institutions would vary in type and character. The Katha-vachaks among the north Indian Hindus and the

4. Op. cit., p. 187.

Granthis among Sikhs would be illustrative of the case in point for they perform a duty which is entirely voluntary to the listeners but has a tremendous impact on them if they do.

On the extreme opposite of the formal schools exist educational programmes loosely structured. On-the-job training schemes, agricultural extension services, community development services, clubs, cooperatives, labour and political organizations etc., constitute this other extreme. The university without walls, workers' university or the open-air university should also be classed here.

Therefore what is called mobility and choice to an individual should be made the cornerstone of philosophy on non-formal education. An open system helps an individual to move within the system both horizontally and vertically. It also widens the scope for him. The need existed to 'open' the 'closed' educational systems. The concept of education limited in time (to 'school age') and confined in space (to school building) decried by Learning To Be downwards is being gradually superseded. By itself it may not appear significant now as the concept itself has become generally popular, the practices flowing from it have a diverse character. With the initial resistance gone chances of success have brightened up considerably. But the innovative character of the concept could not be underplayed.

8. By its very nature non-formal education cannot prosper under direct government supervision and control. It does not lend itself easily to any straiht-jacket modelling. The very fact that non-formal education is mass-oriented and mass-based, it has to derive its resources and inspiration from the local community. All that it needs is some kind of inspired and imaginative leadership and in most cases bureaucracy accustomed to working within a given framework cannot easily undertake the responsibility of providing adequate and meaningful leadership to it. Bureaucracy has to learn to be flexible and cooperative from the point of view of accommodating ideas that have neither been tested nor experimentend. Therefore the structuring of non-formal by itself is fraught with dangers. In other words, non-formal being an innovation only an innovation

in structure would suit it.

For the first time non-formal arrangement stands out as an alternative to a highly structured and formalised course of study directed to success at an examination. It is the least structured and the most diversified of the educational provisions where education may mean anything ranging from literacy to rural/urban development. If the qualifying term 'rural' applied to the proposed development figures a little too often it merely suggests that the rural population needs urgent attention and that they are in majority. This programme has its basis in the community which in this would be largely rural and it is these people who have to mobilize resources so that under their own direction their needs are fully met. Wherever this has happened the development of the community has been ensured.

9. It is one programme whose success depends largely, if not wholly, on the involvement of all adults and more especially of women who constitute half of any population. On this count again it is a complete innovation. Indeed, for this reason alone, it is such a radically different programme. In the post-war reconstruction both in Europe and Asia the massive latent force of adults and women was utilized to a good purpose. In a country like India it is these resources that have not even been tapped what to say of being utilised. Community development programmes have failed because these groups were never properly oriented. Under the present scheme of things non-formal education is being planned to involve them for the first time on a mass scale. This means these adult groups in their spare time could learn something for their own development, be it skill, literacy or numeracy. This is one reason why the non-formal approach is being regarded as Development Work.

(B)

We have already seen that NFE alone holds out promise for India's illiterate masses. That these masses are also poor and ill-equipped for meeting the challenge being posed by the technological revolution taking over our industries, offices, educational institutions and the like. The need for an education that can rise upto any occasion is absolutely necessary.

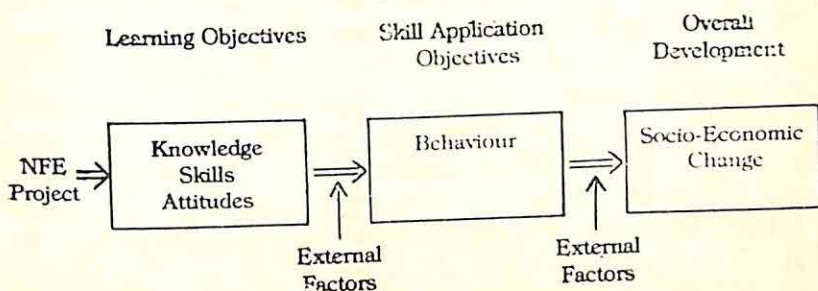
NFE provides an answer to this need for the simple reason that it "includes an enormous range of educational activities for children and adults, activities related to training in literacy and numerical ability, agriculture, family planning, public health and child care, handicrafts, job skills—a great variety of things."⁵ Viewed properly there is hardly any aspect of life which the NFE is not capable of taking care of. The logical conclusion should therefore be that the NFE is India's potential educational key to a variety of its endemic problems provided it is not made to serve its elite population and thereby become structured or non-formally formal.

We have also seen that the question of linkage between formal and non-formal has been discussed at seminars and at least three models proposed. It is a pity that very few persons are gifted with the imagination to think on less familiar channels. Why must NFE have any linkage with formal—a system which it proposes to replace eventually. We are perhaps even now thinking that it is the formal education which would continue to enjoy the status it has acquired over the past several centuries. The fact is technology has revolutionized all prospects of education—whether formal or non-formal. Possibilities exist that NFE would one day overshadow, if not exactly replace, the formal system of education. The NFE today stands on its own and does not depend on the formal for the development of its material whether textual or otherwise. Several models of NFE and its practices have been cited which show that the most successful ones belong to that category in which NFE does not show that kind of dependence. I therefore take it that NFE is already showing sign of its independent existence and promises to flourish unencumbered by fixed ideas.

Similarly, we may have district evaluative practices evolved specifically for NFE. We know already that NFE is linked with developmental goals. The chain of events linking NFE to wider development goals would look like the following:

5. A manual for the analysis of costs and outcomes in non-formal education, p. 31, E.T.S. Princeton, N.I. 1979.

Figure 1



The overall purpose of any term of education is to bring about socio-economic change but it so happens that for NFE it is *the raison de etre*. The NFE has been conceived as a major prop for enriching knowledge, improving skills and forming positive attitudes of those who have missed such opportunities. The end-product of NFE in particular has to be 'overall development' of the individual.

We have also seen that NFE is one area which has immense potential for research. Indeed, it is one area which has witnessed practically no research in India. True, we have both in India and elsewhere people who have collected a lot of material on innovations. In the NCERT itself NFE was preceded by several collections and publications on innovative practices. The Bhumiadhar Experiment of NCERT was the sole major project which fell strictly under the NFE category. Long before NCERT opened a proper unit on NFE the UNICEF assisted projects coordinated through it being innovative in nature were also categorised as non-formal programmes. Strictly speaking there has never been a hard line between an innovative practice and the NFE. We have already attempted to prove in the beginning of this chapter that NFE is an innovation, but would like to warn the reader that all innovations are not NFE. The subtle distinction between the two has been sought to be clarified through this entire volume. Having touched upon the area of research in NFE it is essential to remark that all aspects of NFE programmes shall have to be looked into systematically. These areas have been dealt with in detail. To recount I present a framework for use in classifying

and summarizing research on NFE programmes. The parameters of such a research should include (a) programme goals, (b) characteristics of NFE instructors/supervisors/administrators, (c) characteristics of the clientele, (d) courses and programme content, (e) programme ethos, (f) admission, intake and dropout problems, (g) problem of resources, (h) evaluation procedures, and (i) impact studies and follow-up investigations. On almost all of them one or two studies have been suggested but possibilities exist of multiplying these studies in each area. Evaluative studies form the most important constituent of the programme.

We may also note here that although NFE is a new programme for the country some research has already started. The NCERT, NIEPA and several other organisations have set up small units for NFE and have started preparing evaluative tools for assessing its impact and efficacy. A tool prepared by NCERT's NFE unit has been given in the appendix for reader's ready reference.

Immense possibilities exist for the use of modern technology in NFE programmes. Some initiative has been taken in this country but nothing much is on the ground. It is hoped that Smt. Indira Gandhi Open University, CBSE's open school etc. would take the lead in this matter. Perhaps CIET of NCERT could also take on the pioneering role in this regard.

APPENDIX-I

Brief of the ERIC (NCERT) financed project titled of "Preparation of tools for evaluation of Non-formal Education Instructional Material". Principal Investigator—Dr. Neerja Shukla, NCERT.

There is a vast ocean of instructional material in the field of non-formal education. This material has been developed through various approaches and under different models by various agencies, and organizations including NCERT, SCERT, State Departments of Education and voluntary organizations. To analyze this material a research project was taken up with an objective to prepare the tools for evaluation of NFE instructional material which was financed by the Educational Research and Innovation Committee, NCERT. There were two limitations of the project—firstly it was confined to Hindi-speaking areas and Hindi material only; secondly, the study was taken up at the primary level only.

The instructional material was analysed from the viewpoint of instructional objectives and content. Various contributing factors e.g., needs and problems of the learner, curriculum and syllabus, teaching techniques, national and local objectives etc., which are indirectly or directly related to the effectiveness of the instructional material because they are very much a part of the cognitive aspect of the programme, were taken into account.

Certain evaluation criteria were developed for evaluation of academic and physical aspects of the material. In all five tools were developed which are:

1. Evaluation proforma
2. Analysis proforma
3. Analysis sheet
4. Questionnaire for teachers
5. Identification data of the book.

A criteria for evaluation and analysis proforma have been reproduced here for ready reference (rest of the material may be obtained from the concerned person).

All these tools were tried out in two states viz. M.P. and U.P. The modified tools are ready for use.

EVALUATION PROFORMA

CRITERIA OF EVALUATION

<i>Aspects</i>	<i>Criteria</i>
1.0 Academic Aspects	
1.1 Selection of content	
1.1.1 Nature of content	
1.1.2 Quantity of content	
1.1.1 <i>Nature of content</i>	
(a) Ideational content (Themes and concepts)	(1) Competencies (subject, competencies, language, social science, maths and science. (2) Coverage of content. (3) Orientation to needs-health vocation, civic, social needs psychological needs etc. (4) Reflecting the life style and life experiences of the community (custom, values, social norms, traditions). (5) Local specific (Regionwise, Groupwise, SC/ST Tribal, Sexwise, Social Groupwise etc.). (6) In conformity with the national goals and Indian culture. (7) SUPW. (8) Interesting to the learners.

(b) Linguistic content

(Vocabulary, sentence pattern and patterns of style).

- (1) In conformity with the expected competencies.
- (2) Local styles.
- (3) Group specific.

(c) Forms of expression (drama, dialogue etc.).

- (1) Interesting to the learner
- (2) Suitable form.
- (3) Suited to the content.

1.1.2 *Quantity of content*

- (1) Number of themes/topics.
- (2) Number of concepts.
- (3) Difficulty level of the contents number of lessons according to the difficulty levels.
- (4) Deviation from and inconformity to national goals.
- (5) Proportionate to total teaching hours.

1.2. *Presentation of content*

1.2.1 Textual matter

1.2.2 Exercises

1.2.3 Illustration

1.2.4 Preliminaries

1.2.1 *Textual matter*(a) Presentation in the whole book.
(Arrangement)

- (1) In conformity with the reading interest of the learner.
- (2) Arrangement of lessons in the whole book in accordance with the natural, social environment and different aspects of life (sequencing according to the difficulty level).
- (3) According to environment.
- (4) According to local life.

- | | | |
|---|---|-----------------|
| | (5) According to difficulty level. | |
| | (6) Inter-disciplinary, discipline-wise, integrated needs and problem-based activity oriented, self training. | |
| (b) Presentation in the lesson | (1) Form of expression. | |
| | (2) Length of lesson. | |
| | (3) Qualities of expressions, sequence and unity. | |
| (c) Gradation of Ideational and Linguistic content | (1) From known to unknown. | |
| | (2) From simple to complex. | |
| | (3) From concrete to abstract (concept or frames). | |
| | (4) From observation to reasoning. | |
| | (5) From reality to ideal. | |
| | (6) According to the changing interest of the learner. | |
| | (7) Oriented to the needs. | |
| (d) Teaching techniques: | Teacher's guide only | |
| 1.2.2 Exercises (Lessonwise) | (1) Adequate/Proportionate | |
| (a) Coverage of content (Ideational and Linguistic) | (2) Objective based/appropriate. | |
| (b) Coverage of competencies | Language, Maths, Science and Social Science. | |
| (c) Forms of questions | (Essay, short answer, objective type and activities). | |
| (d) Nature of exercise/questions | <i>Guidelines</i> | <i>Criteria</i> |
| | Attractive | Adequate |
| | Clarity | Compact |
| | Sequence | Brief |
| | Proportionate | Too lengthy |
| (e) Mode of questioning | (1) Oral and written. | |
| | (2) Activities. | |
| (f) Qualities of exercise | (1) Correct language | |

(g) Amount of Exercises
in the whole book.

Bookwise

1.2.3 Illustrations

(a) Amount of space

(2) Providing adequate opportunities for initiative self study, self expressions and activities.

(i) Adequate

(ii) Proportionate.

(3) Unambiguous Language.

(b) Qualities

(1) Proportionate to the content.

(2) Adequate in terms of content.

(1) Relevant to the content.

(2) Fulfilling different functions:

(i) to motivate the learners' attractiveness.

(ii) to concretise the content.

(iii) to give accurate information.

(3) Suitable to specific groups in terms of:

(i) size,

(ii) details, and

(iii) colour.

(c) Percentage of space covered

(i) first six months

(ii) second six months

(iii) second year

Appropriate in terms of distribution of space covered.

(1) Proximity to content.

(2) Appropriate place (location on a page e.g. in the beginning middle or as supportive).

1.2.4 Preliminaries

(a) Preface

(b) Introduction

Relevant to the content of the book.

- (i) Relationship of the book with the content Proportionate.
- (ii) Nature of the subject Interesting and not unduly long.
- (iii) Organization of the content in the book.
- (c) Instructions to teachers
 - (1) Comprehensible.
 - (2) Practicable.
 - (3) Specific.

2.0 *Physical Aspects*

2.1 *Layout*

- (a) Design
 - (i) Appropriate.
 - (ii) Attractive.
- (b) Size of the book
 - (1) Convenient for handling.

2.2 *Format (Get-up)*

- (a) Binding
 - Durable.
 - Opening flat.
- (b) Covering page
 - Thick, Attractive, Durable.
- (c) Paper
 - White, Thick.

2.3 *Typographical factors*

- (a) Type size
 - (i) Free from typographical errors.
- (b) Printing
 - (ii) Legible.
- (c) Print area
 - (iii) Pleasing to the eye.
 - (iv) Appropriate.

2.4 *Price*

- (i) Reasonable.

ANALYSIS PROFORMA

Write below the serial number of lessons against the themes.

S. No.	Themes and Problems related with	Concepts	Serial No. of Lessons	Total	Comment
1	2	3	4	5	6
1.	Home, School, neighbourhood and society				
2.	Birds and Animals				
3.	Games and Sports				
4.	Fun and recreation				
5.	Nature and natural environment				
6.	Courage, bravery and adventure				
7.	Mythology and religion				
8.	Fair, festival and exhibitions				
9.	Health and Hygiene				
10.	History and Indian Culture				
11.	Citizenship				
12.	National Integration				
13.	Industry				
14.	Technology				

1	2	3	4	5	6
15.	Agriculture				
16.	Vocations				
17.	Life Styles				
18.	Financial aspects				
19.	Customs & Traditions				

2. (For Science, Social Science & Maths only).

Write below the serial number of lessons against the following topics and also the concepts included under them.

S. No.	Topic Social Sciences	Concepts	S. No.	Total	Comments
1	2	3	4	5	6

1. Land and climate of our State
2. Irrigation
3. Agriculture
4. Animal World
5. Factories
6. Places for site seeing
7. Transportation in India

1	2	3	4	5	6
8.	Communication in India				
9.	Capital of the State/Country				
10.	Folk Art				
11.	Customs and manners				
12.	Village Panchayat and Panchayat Samiti				
13.	Municipal Corporation				
14.	District Administration				
15.	Legislative Council and Legislative assembly				
16.	History of India				
17.	National festivals				
18.	National Symbol				
19.	Indian Land				
20.	Gift of nature to India				
21.	Developmental Schemes				
22.	National Integration				
23.	Constitution				
24.	Union Government				
25.	Stories from History of India				

1	2	3	4	5	6
26.	Earth and sun, movements of each and lines on the globe.				
27.	Life of people in different countries of the world-Desert, Green Land, Jungles of Canada, Japan, USSR, and United States of America..				
28.	Our World				
29.	Air, Water and Season				
30.	<i>Sciences</i> Rock, soil and minerals				
31.	Force and work				
32.	Commodity and material				
33.	Structure & functions of plants				
34.	Structure of animals and birds and their food.				
35.	Birds				
36.	Work, energy and machine				
37.	House and clothes				
38.	Living things				

1	2	3	4	5	6
39.	Our body and health				
40.	Nutrition				
41.	<i>Mathematics</i>				
	Number-counting, addition				
	subtraction, multiplication				
42.	Indian currency				
43.	Measurement of time				
44.	Measurement of weight				
45.	Measurement of distance				
46.	Measurement of liquid				
47.	Introducing geometric figures				
48.	Area				
49.	Multiplication and division by three digits				
50.	Lowest common factor (EOM) and Highest common factor (GOM)				
51.	Decimal points—addition, subtraction, multiplication and division				

1	2	3	4	5	6
52.	Ratio				
53.	Maintenance of accounts				
54.	Loss and profit				
55.	Average				
56.	Percentage				
57.	Simple and compound interest				
58.	Circumference and area of rectangle and square, measurement of lands.				
59.	Calculating price				

3. Write below the serial number of lessons against each value.

S. No.	Values	Serial No. of Lessons	Total	Comments
1	2	3	4	5
1.	Cleanliness and orderliness			
2.	Cooperation			
3.	Honesty			
4.	Love for living beings			
5.	Love for younger persons			

1	2	3	4	5
6.	Punctuality			
7.	Respect for elders			
8.	Truthfulness			
9.	Alertness			
10.	Dutifulness			
11.	Courage			
12.	Equality			
13.	Kindness			
14.	Patriotism			
15.	Self respect			
16.	Sincerity			
17.	Unity			
18.	Consideration for others			
19.	Obedience			
20.	National Integration			
21.	Social Justice			
22.	Satisfaction in Productivity			
23.	Utilization of time			
24.	Hard work			

1	2	3	4	5
25.	Application			
26.	Moral			
27.	Sacrifice			
28.	Social Welfare and duties			
29.	Active opposition of evils			
30.	Self control			
31.	Tolerance			
4. Point out the difficult words which are beyond the level of student's comprehension (in terms of language).				
Words		Lesson No.	Page No.	
5. Note down the difficult sentences which are beyond the students' comprehension level.				
Sentences		Lesson No.	Page No.	
6. Enlist below the language and factual errors.				
Error	Type of Error		Page and Line	

7. Write below deficiencies of presentation:

<i>Error</i>	<i>Type of Error</i>	<i>Lesson</i>	<i>Page and Line</i>
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<i>8. Subject Competencies</i>	<i>Sl. No. of Lessons</i>	<i>Total</i>	<i>Comments</i>
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(B) For integrated approach

1. Problems and needs
2. Analysis of problems and needs
3. Understanding of the problem
4. Identifying causes
5. Identifying sources of solution
6. Selection of ways for solution
7. Drawing inferences
8. Generalization

9. Approach for presentation.

<i>Disciplinewise</i>	<i>Integrated</i>	<i>Need and Problem Based</i>	<i>Based on Production Activity</i>
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10. Below are given the forms of expression. Write down the serial number of lessons against each.

<i>Forms of Expression</i>	<i>Sl. No. of Lessons</i>	<i>Total</i>	<i>Comments</i>
1. Prose			
2. Poetry			
3. Story			
4. Dialogues			

11. Exercise:

Write the serial number of lessons outside the brackets and the number of questions ideational and linguistic content within the brackets given in the exercises of a particular lessons.
(for language books only).

<i>Content</i>	<i>Lessonwise Number of Questions</i>	<i>Total</i>	<i>Comments</i>
Thematic (Ideational)			
Linguistic			
Grand Total:			

12. Write the serial number of lessons outside the brackets and the number of questions in different instructional objectives within the brackets.

<i>Competencies (subject)</i>	<i>Lessonwise Number of Question</i>	<i>Total</i>	<i>Comments</i>
1	2	3	4
For subjective approach			
<i>Language</i>			
1. Comprehension			
2. Expression			
3. Appreciation			
<i>Mathematics, Social Sciences and Sciences</i>			
1. Knowledge			
2. Application			
3. Aptitude			
For Integrated approach			
1. Problems and needs			
2. Analysis of problems and needs			

1	2	3	4
3.	Understanding of the problem and need		
4.	Identifying causes		
5.	Identifying sources of solution		
6.	Selection of ways for solution		
7.	Drawing inferences		
8.	Generalization		
9.	Practice or SUPW		

13. Note down the number of different forms of questions from each within the brackets and the serial number of lessons outside the brackets.

<i>Forms of Questions</i>	<i>Lessonwise Number</i>	<i>Total</i>	<i>Comments</i>
Short answer			
Objective type			
Activities			
Grand Total:			

14. Illustration

Write below the lesson and page number of the book where the illustrations are good in respect of following aspects.

	<i>Lessons</i>	<i>Page No.</i>	<i>Total</i>
1.	Content		
2.	Presentation		
3.	Placement		

15. Write below the serial number of lesson and and page number of the book where the illustration is/are not good in respect of following aspects.

	<i>Lesson</i>	<i>Page No.</i>	<i>Total</i>
1.	Content		
2.	Presentation		
3.	Placement		

16. Preliminaries

Below are given different items of the ancillary material of the book. Write in the table given below main points of each item and given comments if any regarding their relevance and suitability.

<i>Item</i>	<i>Relevant</i>	<i>Comprehensive</i>	<i>Informative</i>	<i>Practicable</i>
Preface				
Introduction				
Instruction to teachers				
17. Physical Aspects				
<i>Distribution of space</i>				
Give distribution of space in the books with regard to the following items.				
<i>Item</i>	<i>Below 25%</i>	<i>26%-50%</i>	<i>51%-75%</i>	<i>76%-100%</i>
Textual material				
Illustrations				
Exercises				
Preliminaries				
Physical Aspects				

18. Give the information about the following items of the book by ticking (✓) the choice/choices if you agree and crossing out (X) the choice/choices if you don't agree.

<i>Item</i>	<i>Information</i>	<i>Comments</i>
Size of the book	1. Convenient for handling 2. Suitable for the type size and illustration	
Binding	1. Durable	
Cover page	1. Thick 2. Attractive 3. Durable	
Paper	1. Thick 2. White 3. Durable	
Type size	1. Suitable for the age level	
Printing	1. Correct 2. Legible 3. Pleasing to the eye Reasonable/free	

Total number of pages in the book size of the book in inches.

APPENDIX-II

THE TIMES OF INDIA

A THOUGHT FOR TODAY

Excessive liberty leads both nations and individuals into excessive slavery.

—CICERO

Education Draft

The discussion paper outlining the new education policy that will be put before Parliament during the present session does not offer any radical departures from the 1968 blueprint, but is rather a continuation of it. The 10+2+3 formal structure stays in place, except that the ten years at school will be further broken up into 5/3/2. Content-wise, vocationalisation will be emphasised, with provision for introducing it after the eighth standard in addition to the normal availability at the plus-two stage. The aim is to have ten per cent of higher secondary students doing vocational courses by 1990 and 2-1/2 times as many taking them within the five years thereafter. The more important and difficult task is to give vocational learning the status and rewards it lacks. The academic stream continues to be in such demand because of the premium on its products in society at large and the employment market in particular. Since the rewards of vocational education are dependent on economic growth and diversification, upgrading its value is not an educational matter alone, or even mainly.

To universalise elementary education, an "Operation Blackboard" is to be launched. Since the enrolment shortfall is principally among girls, Harijans and tribals, it is appropriate to give these groups special assistance through a variety of incentives. The success of this operation will depend on the manner of its execution. The constitution of an Indian education service and of district education boards responsible

for running all institutions, presumably non-formal programmes as well, upto higher secondary level is a crucial factor. If the service and the boards fall prey to bureaucratism, then any hope of energising school education, especially in the villages, will be frustrated. The new structures might even prove to be a further drag on innovation and improvement. *It is unfortunate that the government continues to see non-formal education (NFE) as essentially an appendage to the formal set-up. So long as it is thus perceived, it will go on being an inferior option.* It has to become the second of a genuine two-track system, with parity of status, facilities and funds for both tracks. This must be so for school as much as for higher education where open universities and other distance learning modes become as important as affiliated, full-time colleges. In the discussion on the draft until the official policy is finalised, educationists have an obligation to bring home to the government that the formal system, while its own, numerous lapses must be remedied, cannot but be inadequate for providing mass education of even minimal quality, and that an elaborate non-formal structure must be urgently established, officially supported to the hilt and generously funded.

APPENDIX-III*

REVISED SCHEME OF NON-FORMAL EDUCATION (1987)

1. INTRODUCTION

Provision of free and compulsory education for all children until they complete the age of 14 continues to be the most important goal of educational development in India. The National Policy of Education-1986 (NPE) contains the following Resolve:

It shall be ensured that all children who attain the age of ✓about 11 years by 1990 will have had five years of schooling, or its equivalent through the non-formal stream. Likewise by 1995 all children will be provided free and compulsory education upto 14 years of age.

*The First Draft.

This implies universal provision of educational facilities within easily accessible distance from the homes of children, enrolment of all children in the age-group 6-14 in educational institutions, retention of every child till he/she completes the prescribed courses of study and creation of conditions for success in order to enable every child to make regular progress from one level to the other and to complete elementary education by the time he/she reaches the age of 14.

2. During the past one decade or so there has been growing concern about the limitations of the formal educational system to meet the educational needs of all children in the age-group 6-14. This concern resulted in search for alternatives to the formal system of education. It has been felt for quite some time that there would continue to be groups socially and economically at a disadvantage who would not be in a position to make use of the facilities provided for whole-time formal education. Secondly, full advantage must be taken of the educational opportunities available for all those children who drop out from the formal system. Most of these children work in farms, in factories or at home to supplement parental earnings or to otherwise assist the family and are therefore, at a disadvantage in comparison with children who can attend whole-time schooling. Thirdly, there exist in different parts of the country, remote habitations where it may not be possible to establish formal schools in the near future. Lastly, the ever increasing cost of education makes it imperative to seek other cost effective methods or modes of education.

3. OBJECTIVES OF THE PROGRAMME

The basic aim of the new Programme of Non-formal Education (PNFE) is to provide educational opportunities for children who cannot, or will not, avail of the facilities of formal schooling education which is relevant to their life and/or work situation, in order that they may better cope with their existential situation, re-enter the system of formal education should they so wish, or continue their education in other ways depending on their choice. In this overall context the specific objectives of the programme are:

- (a) To establish close relationship with the community, particularly the families the children of which are intended as the beneficiaries of PNFE;
- (b) To develop a programme of non-formal education for meeting the educational needs of out-of-school children;
- (c) To identify from the local community young persons and to train them as organisers of NFE centres and as community workers;
- (d) To give special attention to the training of women non-formal education organisers and to girl students with a view to orienting PNFE for furtherance of the objectives of women's development as envisaged in NPE;
- (e) To evolve curricula and learning materials relevant to the needs, environment and working life of the children;
- (f) To stimulate innovation, experimentation and development activities through introduction of flexible structures and processes directed towards evolving learner-oriented and cost-effective programmes in the field of elementary education.

4. FEATURES OF THE NEW PNFE

The National Policy on Education envisages launching of a large and systematic programme of non-formal education for school drop-outs, for children from habitations without schools, working children and girls, who cannot attend whole-day schools. NPE also calls for taking all the necessary measures to ensure that the quality of non-formal education is comparable with formal education. The revised PNFE assumes that if sufficient financial and academic inputs are made, NFE programmes can result in a provision of education comparable in quality with formal schooling. Modern technological aids—such as solar packs for provision of light in NFE centres, audio-visual aids, radio-cassette players—will be used to improve the learning environment of NFE centres, and learning material of high quality will be developed taking into account the fact that

children who work have several assets on which their education should be built. Particular attention will be paid to training of NFE instructors and to ensure equivalence in the level of attainment of children in NFE with those in the formal school system. The essential characteristics of NFE are:

<i>flexibility</i>	in regard to admission requirements, duration, timing, methods, etc.;
<i>relevance</i>	of curriculum—rather than being planned in detail for rigid and excessively structured instruction, it would lay stress on skill development, provision of information needed in real life situations;
<i>diversification</i>	in the type of courses to be offered and the possibility of supplementing the curricular programme with vocational education; and
<i>decentralisation</i>	in management structures and financial powers.

In addition to these basic characteristics of NFE, mention should also be made of some general features which are important for the dynamism and vitality of NFE programmes.

These include:

- A learner-centred approach to education with the instructor as a facilitator in the learning process who will be the key to the strategy in the transaction of the curriculum and organisation of learning activities at the non-formal education centre;
- Making deliberate effort to emphasize learning rather than teaching, and for this purpose the capability of the children to learn from each other should be highlighted;
- Activities will be so organised as to enable learners to progress at their own pace;
- Use of efficient techniques to ensure a fast pace of learning, which among other things, would motivate children to continue their participation;

- Stress on continuous learner evaluation, which has proved to be an effective means to promote fast learning and evaluation centres may be established for evaluation and certification of learners enrolled in NFE centres;
- In terms of scholastic achievements (particularly language and maths), following the norms set in the formal system, both because of its desirability *per se* and because it is essential for entry into the formal structures;
- Creation of participatory learning environment and treating the children with the regard they deserve as persons engaged in productive activities;
- Organisation of joyful extra-curricular activities; including singing and dancing, plays and skits, games and sports, excursions, etc.;
- Ensuring that all facilities and incentives given to girls, children of SC/ST, and others in the formal system, are made available in the non-formal system as well, in addition, of course, to provision of free textbooks and stationery to all pupils.

5. CURRICULUM AND INSTRUCTIONAL/LEARNING MATERIALS

The salient features of the curriculum and learning/instructional materials proposed to be used by children will be relevant to the needs, work life and environment of the learners. The curriculum and learning materials will, however, be developed keeping in view the essential learning outcome and minimum level of learning applicable to different levels in respect of both formal and non-formal modes of education. The essential learning outcomes would serve as a common reference to the evaluation of learners enrolled in schools and non-formal education centres so as to enable children enrolled in non-formal education centres to obtain proper certification for their achievement as well as to take advantage of multi-point entry facilities in regular full-time schools at appropriate stages, if they so desire.

Under PNFE efforts will be made to evolve and adopt different models of non-formal education programme. The agencies implementing the programme at the State/district/

block level will be encouraged to involve and adopt the most suitable model depending upon the requirements of the target groups, the kind of expertise available in and orientation of the implementing agency, the support system available etc. The implementing agency could adopt any of the models already developed or design a new model appropriate to the requirements. It needs to be made absolutely clear that the "models" evolved thus far are only illustrative "models" and adherence to them is not essential. However, the educational programmes under any of these models should be designed in such a way that they conform to the overall objectives of this scheme.

6. ESTABLISHMENT OF NFE CENTRES

The majority of out-of-school children belong to the disadvantaged sections of the society including the Scheduled Castes and Scheduled Tribes, backward classes, landless agricultural labourers and urban slum dwellers. Most of these children are required to help augment the income of their families and to help in household work. The organisation of NFE centres should, therefore, provide educational facilities to these children at a time and place convenient to them so that they would be in a position to complete at least elementary education. This factor will also be kept in view in deciding location of NFE centres.

Admission to the NFE centres will be open to all non-enrolled children and drop-outs in the age-group 6-14 and grouping, if any, of children will be done only on the basis of age. Each centre with one instructor would admit about 25 children. If the number exceeds 30, an additional instructor may be appointed or a separate centre may be established in the same locality. The minimum number of children necessary for establishing a NFE centre will be 10 in case of habitation with schooling facilities while in the case of schoolless habitation at least a community based centre may be established even if the number of children are less than 10 in such habitations.

The NFE centre in a village/locality may be housed in a

community centre or any other private or public place which is deemed suitable for conducting the learning activities. In the case of habitations with primary schooling facilities they could be located in primary school buildings also.

The duration of instruction at the NFE centres will be at least for 2 hours a day. The timing of the centres will, however, be decided by the community. It may be in the morning, afternoon or evening, depending upon the convenience of the learners enrolled.

The children enrolled in the learning centres will be provided with learning materials free of charge. The NFE centres will be equipped with adequate lighting arrangements (solar packs, kerosene or petromax lanterns) mats, box almirah for keeping the learning materials and teaching aids, blackboards, charts, science kits, etc.

7. INSTRUCTORS AND THEIR TRAINING

The instructor is the most important factor in the implementation of PNFE. Some of the important characteristics of the instructor would include:

- being local,
- being already motivated,
- acceptable to the community,
- preferably from the weaker sections of society,
- should give some proof of work done in the community.

Keeping in view the importance of enrolment of girls in non-formal education centres and also the fact that non-formal education programmes have the potentiality of development into major programmes of women's development, women wherever possible be appointed as instructors. While it is desirable that the instructors should have sufficient educational qualifications to enable them to effectively organise the classes, the required qualifications would be made flexible and the lack of them would be made good by their continuing education. Instructors should also be viewed as community leaders and change agents.

Training of non-formal education personnel, particularly the instructors, is the key to the success of the programmes.

Initial training as well as recurrent training are both crucial. There can be several combinations: (i) Three weeks' training at the beginning with one or two spells of 5-7 days' training in the year; (ii) 10 days' training at the beginning with two spells of 5-7 days' training in the year plus 1-2 days' training every month; (iii) 10 days' training at the beginning with 3-4 days' training every quarter plus 1-2 days' training every month, and so on. By and large, training days for the instructors would be about 30 in the first year and about 20 in the subsequent years. The exact permutation will be left to the organising agency, but there will be insistence on that agency to be clear about the duration and the nature of training it envisages and its indicating it at the time of taking up the programme. The need for participatory training, based on the experiences of the participants, is now well-recognised. Actualisation of such training will call for considerable planning and investment. A variety of agencies shall be involved and help taken of diverse training side and educational technology including TV/VCR.

8. ESTABLISHMENT OF EVALUATION CENTRES

Development of question banks and establishment of evaluation centres for testing and certification of learners enrolled in the NFE centres will be an important activity under the new PNFE. The test items for question banks will be developed with the help of NFE instructors, teacher educators and other persons with expertise or insight in this matter, and they will be kept in the form of books/cards and/or in small computers at the evaluation centres. The evaluation centres will be established in three stages. During the first stage, evaluation centres will be established at the district level at DIETs. Evaluation centres at the block level will be established during the second stage (eighth plan). This will be followed, in due course, by establishment of an evaluation centre at the sub-block level. These evaluation centres would become the bases of centralised testing service for certification of learners enrolled in learning centres. They will help in determining the level of learning attained by the learners at different stages of

elementary education, in making intra-and inter-group comparison and in identifying disparities in performance by NFE centres and in gathering feedback for designing remedial measures.

9. SUPERVISION AND ADMINISTRATION

In the administrative restructuring, the most important is the supervisor, for, on him/her depends to a great extent the quality of the programme. Depending upon the local situation and feasibility, different strategies could be adopted for supervision of non-formal education centres. The centres may be supervised through whole-time NFE supervisors with about 20-25 centres under his charge, through school complexes, or through trained local youth. The calculation of cost for field supervisor is proposed to be raised from Rs. 180 to Rs. 400 per centre per annum. Rather than appointing whole-time fully-paid supervisors, the implemented agencies may prefer well trained local youth as supervisors. In practice, generally speaking, a local educated youth may be given supervisory responsibility for 8-10 NFE centres, plus the task of running a village continuing education centre for which he/she may be paid an honorarium of Rs. 200/- per month. That person would thus get an honorarium of Rs. 450/- to Rs. 550/- per month. Special attention will be paid to the training of such person. Wherever possible, supervisory responsibility for adult education and NFE be entrusted to the same person, thereby reducing the area to be covered by a supervisor.

Approximately 100 NFE centres (or 10 supervisors) will comprise a project which would be taken up in a compact and contiguous area coterminous, as far as possible, with CD Block. The project management structure would comprise a Project Officer, an Accounts Clerk, an LDC and a couple of class IV staff. The PO will be provided a Motorcycle/Scooter for mobility. The main functions of the PO would be (i) to select the supervisors, (ii) to generally supervise the programme, (iii) to promote inter-agency linkages to give development orientation to the field programme, (iv) to monitor the programme, (v) to ensure provision of materials and supplies, etc.

The District Education Officer/District Adult Education Officer will be assisted by reasonably senior officers, with supporting staff, to exclusively attend to NFE. Strengthening is also envisaged at the State Level. Wherever possible the administrative and supervisory structure for NFE and adult education will be amalgamated—including the programmes to be taken up through panchayati raj bodies and voluntary agencies.

10. CONTINUING EDUCATION

Scope for continuing their education is important for all learners. The strength of the PNFE will depend to a considerable extent on our being able to link the initial programmes of NFE with effective programmes of continuing education. This has several implications for PNFE. *One* is to ensure that the possibility is open for children to move from the non-formal stream to the formal system. For this purpose arrangements will be made for testing of children in NFE stream with reference to an equivalent stage in the formal system i.e., after class V and class VIII. Specific instructions would be issued to facilitate lateral entry into the formal system for students of non-formal education stream. The *second* point in this regard is that non-education centres would insist on children completing education at least upto V class level, and arrangements of non-formal education upto class VIII would be provided wherever necessary. Efforts would also be made to link non-formal courses with the Open Schools (such as the one running in Delhi under the auspices of CBSE). The *third* aspect of this matter is provision of scholarships to the needy children, particularly working children, to continue education in the formal system. No provision has been made for this in this revised scheme, but the point is being made for further action in future. The *fourth* aspect of this matter is that good continuing education centres should be set up in rural areas and efforts made to integrally link them with PNFE. And the *fifth* requirement in this connection is provision of vocational and technical courses of a wide variety for children and youth who have completed education upto a stage equivalent to class V and VIII. Most of the courses would be of

non-formal nature. Provision already exists for them under TRYSEM. Some courses could also be in the Vidyapeeths (as in Karnataka) and these children could also be given preference in admission to the courses run by Krishi Vigyan Kendras.

11. INVOLVEMENT OF VOLUNTARY AGENCIES

Several voluntary agencies have, in the past, successfully organised NFE programmes. Very often voluntary agencies have banks of committed workers who have the capability to establish rapport with the local community and they can also function with flexibility and dynamism. Several panchayati raj institutions have also shown keen interest in NFE and they have the capability to run such programmes. NFE categorically states that "much of the work of running NFE centres will be done through voluntary agencies and panchayati raj institutions". It is, therefore, proposed to take positive measures to involve in PNFE as many voluntary agencies and panchayati raj institutions which can suitably take up this programme. It is also proposed to improve the existing administrative arrangements for support to VAs. In addition to running of NFE centres in the form of projects, voluntary agencies would also be encouraged to take up a wide variety of other activities which may include:

- non-formalisation of the formal education system;
- examination of issues relating to linkage between NFE and formal education;
- innovation and experimentation;
- technical resources development, e.g., training production of teaching/learning materials;
- evaluation and research.

The voluntary agencies will be expected to follow the financial pattern laid down in this scheme with some flexibility in unit cost, of say upto 20%. Such proposals will be examined by a grants-in-aid committee and where necessary a representative of the voluntary agencies would be invited for discussion with the committee. Projects of voluntary agencies will be entertained for a period of 3-4 years. They would be required to send the initial proposal through the State Government, but at

the subsequent stages the voluntary agencies will directly approach the Ministry for release of grants-in-aid. The State Governments, would, of course, be expected to oversee the implementation of voluntary agencies' projects.

12. MONITORING EVALUATION AND RESEARCH

In order to implement the PNFE effectively, it is imperative that simultaneous attempts are made to collect and analyse supporting data on all the academic and administrative aspects of the programmes. Therefore, systematic evaluation of the programme as a whole as well as the different components in the implementation of the project will be taken up from time to time. The programme will be subjected to continuous monitoring and evaluation both by internal and external agencies. In addition to this, several research studies related to effectiveness of different aspects of the project such as curriculum and instructional materials, strategies and methodologies adopted for imparting education to children enrolled in the NFE centres, cost effectiveness of different models of non-formal education programmes etc., to name a few, will be undertaken. Universities, institutions of social science research, voluntary agencies, social activist groups etc., will be actively involved for undertaking research in issues pertaining to NFE and the outcomes of those researches will be utilised for strengthening the PNFE.

13. ORGANISATIONAL SET-UP

The Ministry of Human Resource Development, Government of India, will be responsible for overall administration of the PNFE, development of policy guidelines for the implementation of the programmes at the national level, monitoring of activities under the project and utilisation of funds and coordination of various activities of different agencies involved in implementation of the programmes.

The network for offering the professional support for carrying out different activities associated with the implementation of PNFE will include NCERT, NIEPA, CIEFL, CIIL and Kendriya Hindi Sansthan at the central level; SCERTs/SIEs, SISEs, Adult Education State Resource Centres, University

Departments of Education, training colleges and voluntary agencies at the state level and District Institutes of Education and Training (DIETs), Centres for Continuing Education (CCE) and lead schools in the school complex at the district and field levels.

NCERT will function as the central, technical coordinating and monitoring agency in respect of all activities related to development of curriculum, preparation of instructional/learning/training material and training of instructors of PNFE centres. It will be responsible for:

- Development of guidelines for development of curriculum at the States/UT level.
- Development of training packages for the orientation and training of project personnel at different levels.
- Development of prototype curriculum and learning materials for use in non-formal education centres.
- Undertaking training activities for project personnel at the States/UT level on the different aspects involved in the implementation of the project.
- Assisting project teams of the SCERT/SIE level in planning and organising activities related to implementation of PNFE at the state level.
- Conducting research studies in different areas related to the formulation and implementation of the programme.
- Providing technical assistance to the States/UTS for monitoring and evaluation of activities carried out under PNFE.

The task related to utilisation of mass media and preparation of audio/video/television programmes associated with the PNFE will be coordinated at the national level by the Central Institute of Educational Technology (CIET) in NCERT and the state level in collaboration with all other agencies engaged in development and production of media programmes.

The activities related to the PNFE at the State Level will be coordinated by the Department/Directorate of Education in collaboration with the SCERTs and the State Resource Centres set up under the National Adult Education Programme. These will be responsible for:

- Coordination and monitoring of activities under the project at the State/UT level.
- Development of curriculum and instructional materials for use in NFE centres.
- Organisation of orientation/training courses for various categories of personnel such as Education Officers, Project Officers, Supervisors, Instructors of non-formal education centres.
- Undertaking evaluation and research studies at the State level.

The District Education Officers/the District Adult Education Officer and the District Institutes of Education proposed to be set up in the near future will be responsible for providing the academic and administrative support necessary for the successful implementation of the project activities at the district/block level. The DIET will act as a District Resource Centre and will be responsible for:

- Training of supervisors and instructors of NFE centres.
- Development of locally relevant instructional learning materials.
- Try out and field testing of instructional learning materials.
- Development of audio-visual aids and media support programmes.
- Overall academic supervision of the programme at the district level and monitoring and evaluation of activities under the programme at the district/block level.

14. FINANCIAL PATTERN AND FLEXIBILITY REGARDING APPLICATION

It is proposed that in the Seventh Plan, as in the Sixth Plan, there will be the following components of the non-formal education programme:

- (a) Assistance to State Governments for setting up and running non-formal centres (boys and girls both) on 50:50 basis.
- (b) Assistance to State Governments for setting up and

running non-formal education centres exclusively for girls on 90:10 basis.

- (c) Assistance to voluntary agencies for setting up and running non-formal education centres on 100% basis.
- (d) Assistance to academic institutions in the field of school education for taking up innovative projects in the field of non-formal education on 100% basis.

During the Sixth Plan the application of the Centrally Sponsored Scheme of NFE has been restricted to 9 educationally backward States. Keeping in view that the educational situation in these States continues to be unsatisfactory, and in view of the financial constraints being faced by these States, there is a clear justification for continuance of priority to them. However, even in the educationally advanced States there are several regions and client-groups which call for special support. These include:

- the hilly tracts,
- predominantly tribal areas known for educational backwardness,
- urban slums,
- projects for education of working children, etc.

It is proposed to extend these schemes to these areas. Extension of these schemes to other regions and client-groups may also be considered in consultation with Planning Commission and IF.

The number of new centres proposed to be started during the four years 1986-87 to 1989-90 is 3.00 lakh which will result in 2,27,36,100 beneficiaries. There will be a total of 4,72,342 centres by the end of the 7th plan and the holding capacity of the centres in 1990 will be 118.09 lakhs. It is proposed to start 75,000 centres each year, 60,000 primary level and 15,000 middle level centres to keep the ratio at 4:1. It is proposed to start 30,000 centres per year with 50% central assistance 30,000 with 90% central assistance (exclusively for girls) and 15,000 with 100% central assistance through voluntary agencies.

APPENDIX-IV

FINAL SCHEME

(May 1987)

Salient Features of the Revised Scheme of Non-Formal Education

(Appendix to letter No. 1-22/87-NFE dated, 15.5.87 from Joint Secretary, School Education addressed to all Education Secretaries)

The Policy

Universalisation of Elementary Education (UEE) has been one of the goals of educational development. It is a part of the Minimum Needs Programme as well as the 20-Point Programme 1986. The National Policy on Education 1986 also gives an unqualified priority to UEE. It resolves that it shall be ensured that all children who attain the age of about 11 years by 1990 will have had five years of schooling, or its equivalent through the non-formal stream, and, likewise, by 1995 all children will be provided free and compulsory education upto 14 years of age. The Policy further states that the National System of Education implies that upto a given level all students have access to education of a comparable quality. The relevant portion of the Policy and the Programme of Action approved by Parliament are at Annex I.

Financial Pattern

2. The National Policy on Education 1986 envisages a large and systematic programme of non-formal education (NFE) for habitations without schools, school dropouts, for working children and girls who cannot attend whole day schools. NFE will be a flexible system and modern technological aids will be used to improve the learning environment. Talented and dedicated persons from the local community will be chosen to serve as instructors and particular attention paid to their training. Good quality learning material will be developed and provided free of charge to all pupils in the non-formal centres. Since the Sixth Plan there is a Centrally assisted scheme for running of non-formal education centres

in the ten educationally backward States, viz. Uttar Pradesh, Jammu and Kashmir, Rajasthan, Madhya Pradesh, Andhra Pradesh, Bihar, Orissa, West Bengal, Assam and Arunachal Pradesh. Under this scheme assistance has been given to State Governments and voluntary agencies for setting up 1.50 lakh centres. The pattern of Central assistance during the Sixth Plan was as follows:

(i) General centres of NFE	50%
(ii) NFE centres for girls	90%
(iii) Projects of voluntary agencies	100%
(iv) Innovative Projects	100%

This pattern of assistance is intended to be continued. In addition to the educationally backward States it is proposed to extend this scheme on the above pattern to all States in urban slums; hilly, desert and tribal areas; and in projects for education of working children. It is proposed to reorganise the programme on project basis and to link the projects with a comprehensive programme of continuing education and vocational training (being proposed as a part of the adult education programme). The expenditure pattern in the scheme has been revised keeping in view the emphasis in the Education Policy on upgradation of the quality of NFE and the deficiencies observed in the evaluation of the programme undertaken by the Ministry. These are approximate costs. The size and number of innovative projects will depend on specific proposals and needs. Detailed calculations of the funding pattern for one NFE centre and the staffing pattern have been given in Annex III and IV. It shall be essential for the State Governments to wholly adopt this pattern. States which pay less than the amount indicated in this scheme to the staff may not remain eligible for Central assistance. This programme will cost Rs. 23044.74 lakhs by 1990.

Parameters of Revised Scheme

3. The basic parameters of the new scheme of non-formal education include the following:

1. There is no insistence of adoption of what used to be known as the "MP model", and each implementing

agency can adopt a model which is suitable for the clientele, there is insistence on incorporation of the core curriculum referred to in Section 3 of NPE. There is also insistence that the level to be achieved, particularly in language and Mathematics, upon conclusion of the primary stage and the middle stage should be comparable with the relevant stage in the non-formal system.

2. NFE centre should be well lit and attractive place which should create a warm and welcoming atmosphere for children. The interesting curriculum, co-curricular and extra-curricular activities should supplement the usual instructional programme. This will include games and sports, cultural activities, scouting and guiding, excursion, etc.
3. Teaching/learning material of good quality should be provided to students free of charge. NCERT and SCERTs have initiated some action in this regard. A great deal more needs to be done.
4. Greatest attention should be paid to the selection of instructors. As mentioned in Annex II, the instructor should be a local person who is motivated to serve the community, particularly the weaker sections. Keeping in view the need for increasing the number of women instructors it would be advisable to give priority to women if they are available. Condensed courses should be organised for girls so that women NFE instructors can become available.
5. Funds for supervision in the revised scheme have been provided at the rate of Rs. 400 per NFE centre. The supervisor should be a local person who must reside in close proximity of the centres he/she is expected to supervise. The number of NFE centres to be supervised by a supervisor has been kept flexible—it can range from 5-6 to 10-12. The supervisor is a part-time worker, giving about half of his time to this work. Wherever feasible experienced instructors possessing qualifications such as matriculation may be appointed.

6. The past experience shows that training of instructors and supervisors was poor. Adequate funds have been provided under the scheme to organise an initial training of 30 days for all instructors, followed by about 20 days retraining every year. Divided training of 20 days in the second and subsequent years could be imparted in one session or broken into 2 sessions to be organised at different periods. Likewise special attention has to be paid to the training of supervisors.
7. Till district institutes of education and training are established special improvisation has to be made for organisations of the training. This could be done through good teacher training institutions, voluntary agencies or by bringing together good trainers under the auspices of the project administration.
8. The management structure of NFE should be reorganised on project basis. Detailed advice in this regard is given in the following paragraphs.

Reorganisation of NFE Scheme into Projects

All expansion of NFE programme will be in the form of projects. The salient features of the project approach have been given in para 20 of Annex II. It has been found that scattering NFE centres in a wide geographical area is not conducive to efficiency in management or academic output. On the other hand if the programme is run in a compact and contiguous area it facilitates supervision, makes management a feasible task and can create a spirit of solidarity among the NFE workers.

As far as the old NFE centres are concerned the following procedure may be adopted:

- (a) On the basis of a review of the location of existing centres a project area may be defined.
- (b) NFE centres running outside the project area so defined should be shifted to the defined project area. The centres which have completed a course or centres which

have not been running efficiently and deserve to be closed down should be shifted immediately. Those which are in the midst of a two or three year course should be shifted after completion of the course.

- (c) No new centres should be opened except in accordance with the project approach.

Involvement of Voluntary Agencies and Panchayati Raj Institutions

NPE clearly spells out that much of the work of running of NFE centres will be done through voluntary agencies and panchayati raj institutions. The Scheme of Assistance to Voluntary Agencies for Non-Formal Education for Elementary Age-Group Children under the Programme of Universalisation of Elementary Education and the Scheme for Assistance for Experimental and Innovative Programmes for Education at the Elementary stage, including NFE have recently been revised and communicated to the State Governments vide letter No. F. 1-44/86-NFE dated, 12 February, 1987. The Scheme requires that the State Governments should send their comments on the application of a voluntary agency within a stipulated period, making clear that the Central Government may entertain an application if no comments of the State Governments are received within that period. The Central Government would naturally like to completely avoid such a contingency. Hence it is necessary that the concerned authorities in the State Government pay immediate attention to the requests of voluntary agencies for taking up NFE projects. Voluntary agencies should also be expected to take up their projects in a compact and contiguous area and there should be no overlap between the programmes of voluntary agencies and the State Government.

The Central Government has not prepared any scheme for financial support to panchayati raj institutions. If the panchayati raj system in the State is dynamic and already entrusted the responsibility for primary education, the State Governments may consider transferring implementation of NFE also to the panchayati raj institutions. Even where such a

decision is not taken the State Governments may, on a selective basis, entrust the work of implementation of NFE projects to well-run panchayati raj institutions.

Staff Selection and Training

As indicated above, supervisors and instructors will be drawn from the local community and the main criteria for their selection would be their commitment to the cause of community service. As far as the project officers and District and State level officers are concerned, their selection should be made in such a manner that talented persons who have a commitment for non-formal education and have given evidence of achievement orientation are selected. This can be done by preparing rules for special selection, as has been done by Government of Rajasthan. In that State a certain multiple of the number of vacancies are included in the zone of consideration and the most suitable person is selected even if it means selection of a rather junior person.

Evaluation and Monitoring

The Ministry of HRD (Department of Education) in consultation with NIEPA and NCERT will lay down detailed guidelines for management information system. Effort is also being made to involve some institutions of social science research and of higher education to undertake external evaluation on an on-going basis. Till all these procedures get established the State Governments may lay down simple proformae for collection of information regarding the running of centres, selection of staff, enrolment in attendance in NFE Centres, availability of learning materials, training of functionaries, progress of learners etc.

INDEX

- A.H. University College of Bogra, 63
- Academic designs, 44
- Academy for Rural Development, Bangladesh, 63
- Administrative Models, 31-34; Survey of, 44, 45
- Adult Education, 6, 7, 9, 32, 33, 58, 62; Classification of, 77
- Afghanistan, 70
- Agriculture Rehabilitation Project, Sudan, 60
- Altabach, Philip, 41
- Andhra Pradesh, 6, 21
- Applied Nutrition Project (ANP), 66
- ARSSI Rural Development Unit (ARDU), 64
- Arunachal Pradesh, 24
- Assam, 6, 21
- Assamese, 27
- Bangladesh, 63, 69
- Bar-el-Ghazal, Project, 60
- Bauan Nutrition Programme, Philip-pines, 67
- Bengali, 27
- Bhumiadhar Experiment, 83
- Bihar, 6, 21
- Bose, Subash Chandra, 52
- Botswana, 68
- CAPE Scheme, 23-26
- CBSE's Open School, 84
- Central Advisory Board of Educa-tion (CABE), 5
- Chilalo Agricultural Development Unit (CADU), 64
- Child Nutrition Centre (CNC), 67
- Chimaltenango Development Pro-ject, Guatemala, 69
- Chinese Experience, 71-73
- CIET, 84, 119
- Clientele, 7-10, 42
- Community Development, 57
- Condeleria Project, 65
- Continuing Education, 116-17
- Catabato Rural Uplift Movement (CORUM), 58
- Dadar and Nagar Haveli, 24
- Daridra Narayan, 12
- Development Activities in Commu-nity Education and Participation (DACEP), 25; 26, 27
- Dharma*, 13
- Drop-outs, 43
- Economic Development and Educa-tion, 2
- Ecuador, 67
- Elementary Education, 21, 25
- Employment, 68
- Engels, 12
- Ethiopia, 63-64
- Expected Behavioural Outcomes (EPOS), 25
- Feeding of Vulnerable Groups, Thailand, 66, 67
- First World Countries, 4, 6
- Formal Education, 3, 4
- Gandhi, Mahatma, 52
- G.N.P., 2
- Green Revolution movement, Philippines, 57
- Guatemala, 59-60, 69

- Hindi, 27
 Hindu Philosophy, 13
 Humanism, 12, 14-19
 Huxley, Julian, 16
- India, 4, 70, 71, 75, 77; adoption of NFE, reasons of, 4-5; beginning of NFE Programme, 5-6; Goals and Schemes of NFE, 20-40
 Indian Institute of Education, 29-31
 Indira Gandhi Open University, 84
 Informal Education, 3
 Institute for Mathematical Studies in the Social Sciences (IMSSS), 70
 Integrated Administrative Model, 38, 39
 International Maize and Wheat Improvement Centre (CIMMYT), 65
 Iraq, 62
- Jammu and Kashmir, 6, 21
- Kashm-el Gizba Agricultural Project, 60
 Khalis Project, Iraq, 62
 Korea, 57, 65-67, 70
 Kothari Education Commission, 53
 KVI Board, 29
- Literacy, 9, 24, 56
- Madhya Pradesh, 6, 21
 Malaysia, 66, 70
 Marx, 12
 Mobile Trade Training School (MTTS), 59
 Mother's Clubs, 65-66
 M.P. Model, 10, 23, 26, 28, 29
- Naik, J.P., 53
 National Adult Education Programme (NAEP), 6
 National Council of Educational Research and Training (NCERT), 6, 22, 24, 25, 27, 28, 41, 42, 46, 83, 84, 85, 119
- National Institute of Educational Planners and Administrators (NEIPA), 26, 32, 84
 Natural Laws of Justice, 13
 Nehru, Jawaharlal, 52
 Nehru Yuvak Kendras, 9, 29
 Nepal, 59
 Nicaragua, 70, 71
 Non-Formal Education, Alternative to formal education, 4; As a process, 4; Classification of, 2; Clientele of, 7-10; Concept of, 1-10; Definition of, 1-2; Difference from formal and informal education, 3; foundation of, 11-19, Goals and the Schemes of, 20-40; Linkages with other programmes, 6; models of, 23-24, 34, 38-39, Organization and Structure of, 36-38,; Research on, 41-48; Role of State and Voluntary Organisations in, 49, 55
 N.S.S., 9
- Occupational Skills, 43
 OECD, 77
 Open Air University, Philippines, 70
 Orissa, 6, 21
 Oriya, 27
- Pakistan, 69
 Petchburi Teacher College, 58
 Philippines, 57-58, 67, 70
 Planned Parenthood Federation of Korea, (PPPK), 65-66
 Pondicherry, 24
 Public Law, 48, 59
 Puelela, 64-65
 Pune, model, 26, 29, 30, 31
- Radio-Mathematics Project, Nicaragua, 70, 71
 Rajasthan, 6, 21
 Regional College of Education, 27

- Regional Decentralised Resources Centres (RDRCs), 25
Rockefeller foundation, 65
Role, Perception, 46
Rural Development, 9, 59
Rural Education, 59
Saemaul Education Project, South Korea, 57
Saint Ravindar, 52
SCERT, 22, 25, 27, 42, 85
Scheduled Castes, 12, 23, 24, 52
Serowe Brigades, 68
Shawnirvar Project, 63
Singapore, 70
Slums, 8
South America, 2
Sri Lanka, 62-63, 68, 70
Stanford University, 70
Sudan, 60-61, 70
SUPW, 25
Swaziland, 70
Swedish International Development Authority (SIDA), 64
Tanzania, 56, 57
Telugu, 27
Thai Kurabo Weaving Factory, 58
Thailand, 58, 66, 67, 70
Thana Training and Development Centre (TIDC), 63
UNESCO, 9, 41, 78
UNICEF, 22, 23-25, 62, 83
United Kingdom, 50
Upper Nile Project, 60
Upper Volta, 59
USA, 9, 45, 69, 70
USAID, 70
Uttar Pradesh, 6, 21
Vivekananda, 12
Vocational Training Centre (VTC), 69
Voluntary Organisation, 49, 117, 118
West Bengal, 6, 21
World War II, 12
Youth, 8
Youth Social Development Project; Sri Lanka, 69



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CURRICULUM CONSTRUCTION FOR YOUTH DEVELOPMENT

—R.M. Kalra & R.R. Singh



The Third World today stands on the threshold of an era when new sources of energy will have been harnessed for the benefit of mankind. To be able to employ these powerful tools of progress, developing countries will have to inculcate a scientific attitude in the youth. Only then would they be in a position to play a vital role in transforming their countries, weaning them away from the path of obscurantism and leading them towards the road to scientific humanism.

The need for development of an approach towards curriculum construction for youth training with particular emphasis on developing a scientific temper has been felt for a long time. A few attempts have also been made in this direction.

In this book, the authors have tried to focus on values as a basis of curriculum construction for youth development and training, as the youth, especially in the Third World, today find themselves in the midst of a crisis of values. Youth educators should find the book helpful in designing a curriculum for youth development to suit the needs of their countries.

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